DOCUMENT RESUME

ED 392 975 CE 071 150

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TITLE Employer Participation in Work-Based Learning.
INSTITUTION Policy Studies Associates, Inc., Washington, DC.
SPONS AGENCY Congress of the U.S., Washington, D.C. Office of Technology Assessment.
PUB DATE 14 Jul 95
CONTRACT A3-0551-0
NOTE 202p.
PUB TYPE Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC09 Plus Postage.
DESCRIPTORS Case Studies; *Employer Attitudes; *Incentives; National Surveys; Participant Characteristics; Participant Satisfaction; *Participation; Questionnaires; *School Business Relationship; *Work Experience Programs
IDENTIFIERS *Employer Role; Employer Surveys; Massachusetts (Boston); Pennsylvania (Philadelphia)

ABSTRACT

A study examined the incentives and disincentives for employer involvement in established work-based learning (WBL) programs. Data were collected from the following sources in March-April 1995: case studies of selected programs offering WBL opportunities in Boston (Massachusetts) and Philadelphia (Pennsylvania); telephone interviews with 21 WBL program coordinators across the United States; and telephone surveys of 86 employers in 15 communities with high levels of employer participation in WBL. The main incentives for participation in WBL cited reflected employers' desire to attract new employees, help improve education and the community, reduce the costs of recruiting new employees, and gain an opportunity to make improvements within their organization. The main disincentives cited may be categorized as follows: employer-related factors, WBL program-related factors, and economic uncertainty. Although most of these are beyond the control of programs, their coordinating entities, or their governing bodies, several factors related to program design/structure, coordination, and outreach/employer recruiting that employers considered important by employees can be controlled by programs. Contains 18 tables/figures. Appendixes constituting approximately 75% of this document contain the following: profiles of Boston and Philadelphia; ratings of incentives and disincentives to WBL participation; interview guides/results; and analysis of employers grouped by similar characteristics.) (MN)

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ED 392 975

EMPLOYER PARTICIPATION IN WORK-BASED LEARNING

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July 14, 1995

Prepared under contract for the Office of Technology Assessment, U.S. Congress
Contract A3-0551-0

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Acknowledgments

I. Introduction

Employer involvement is a critical element in improving the transition from school to work for America's youth. The School-to-Work Opportunities Act (STWOA) of 1994 specifies that federally funded work-based learning programs must include planned job training and work experience, workplace mentoring, instruction in general work competencies, and broad instruction in a variety of industry-related elements. One lesson to be learned from early work-based learning program efforts is that recruiting employers to participate--and maintaining their involvement--is not an easy task. To generate an adequate number of work-based learning opportunities for today's youth, it is essential to understand the reasons why employers do and do not choose to participate in work-based learning programs and how their participation might be increased.

The purpose of this study was to describe and analyze the incentives and disincentives for employer involvement in established work-based learning programs. In addition to detailing incentives and disincentives expressed by employers, this study provides information and analysis on (1) how communities have successfully attracted and maintained employer participation in programs of work-based learning and (2) implications for expanding work-based learning in the future.

The study was sponsored by the Office of Technology Assessment (OTA) as a part of a larger effort to explore youth and work-based learning; it was conducted by Policy Studies Associates (PSA), a private education research firm.

Methodology

The study draws on data obtained during the months of March and April 1995 from three sources: (1) case studies of selected programs offering work-based learning opportunities in two communities--ProTech in Boston and both the Education for Employment program and Philadelphia High School Academies in Philadelphia; (2) telephone interviews with 21 coordinators of work-based learning programs across the country; and (3) telephone surveys with 86 employers in 15 of those communities where programs were well-developed and supported by a large number of employer participants. Due to the relatively small sample sizes, these data are not nationally representative; rather, they explore a range of perceptions of work-based learning from program coordinators and employers across a variety of industry areas. These data--and, therefore, this analysis--specifically focus on incentives and disincentives for employer participation.

Case studies. Using data from previous studies of work-based learning and information provided by OTA, PSA identified Boston and Philadelphia as the two case-study sites. They were selected because they were considered to be comparable in a number of areas. Specifically, the following criteria were considered in the selection of the two sites: (1) type of industry in the community (e.g., one main industry, several smaller industries); (2) economic environment; (3) demographics (e.g., urban, rural); (4) age of program; (5) number of student participants; (6) type of body coordinating work-based learning efforts (e.g., Private Industry Council [PIC], regional employment board, vocational education center, state technical assistance center); and (7) size of participating businesses. Priority was placed on identifying a pair of sites that focused their work-based learning initiatives in two common industries.

PSA conducted two-person, two-day site visits to ProTech in Boston and to the Education For Employment Program (EFE) and the Philadelphia High School Academies in Philadelphia. Demographically, the two cities are a relatively close match in terms of race and ethnicity (although Philadelphia is much larger). The programs in both cities offer work-based learning opportunities in financial services and health care. ProTech and EFE serve approximately the same number of students. Like ProTech, Philadelphia's High School Academies program is well-established and has a serious work-based component.

Case study site visits included interviews with (1) program staff, including work-based learning directors, recruiters, and coordinators; (2) employer participants--including workplace supervisors, human resources personnel, and executives--from several industries, but specifically those in health care and financial services; and (3) school officials who have direct interactions with participating employers. We conducted phone interviews with employers who were former participants and non-participants in work-based learning and with representatives of business organizations and trade associations (e.g., Chamber of Commerce).

We developed separate case study profiles of both sites (see Appendix A); findings from the case studies are integrated into Chapters III, IV, and V of this report.

Interviews with program coordinators. PSA conducted initial telephone interviews with program coordinators at 21 work-based learning sites, which were selected based on the following criteria: (1) age of program; (2) duration of students' work experience (i.e., no programs that are primarily job shadowing or short-term visits); (3) type of entity coordinating work-based learning efforts (e.g., PIC, regional employment board, vocational education center, state technical assistance center); (4) number of student participants; (5) demographics (e.g., urban, rural); and (6) type of industry in the community (e.g., one main industry, several smaller industries). (See Exhibits 1, 2,

Exhibit 1

Communities Surveyed and Visited for Study of Employer Participation in Work-based Learning

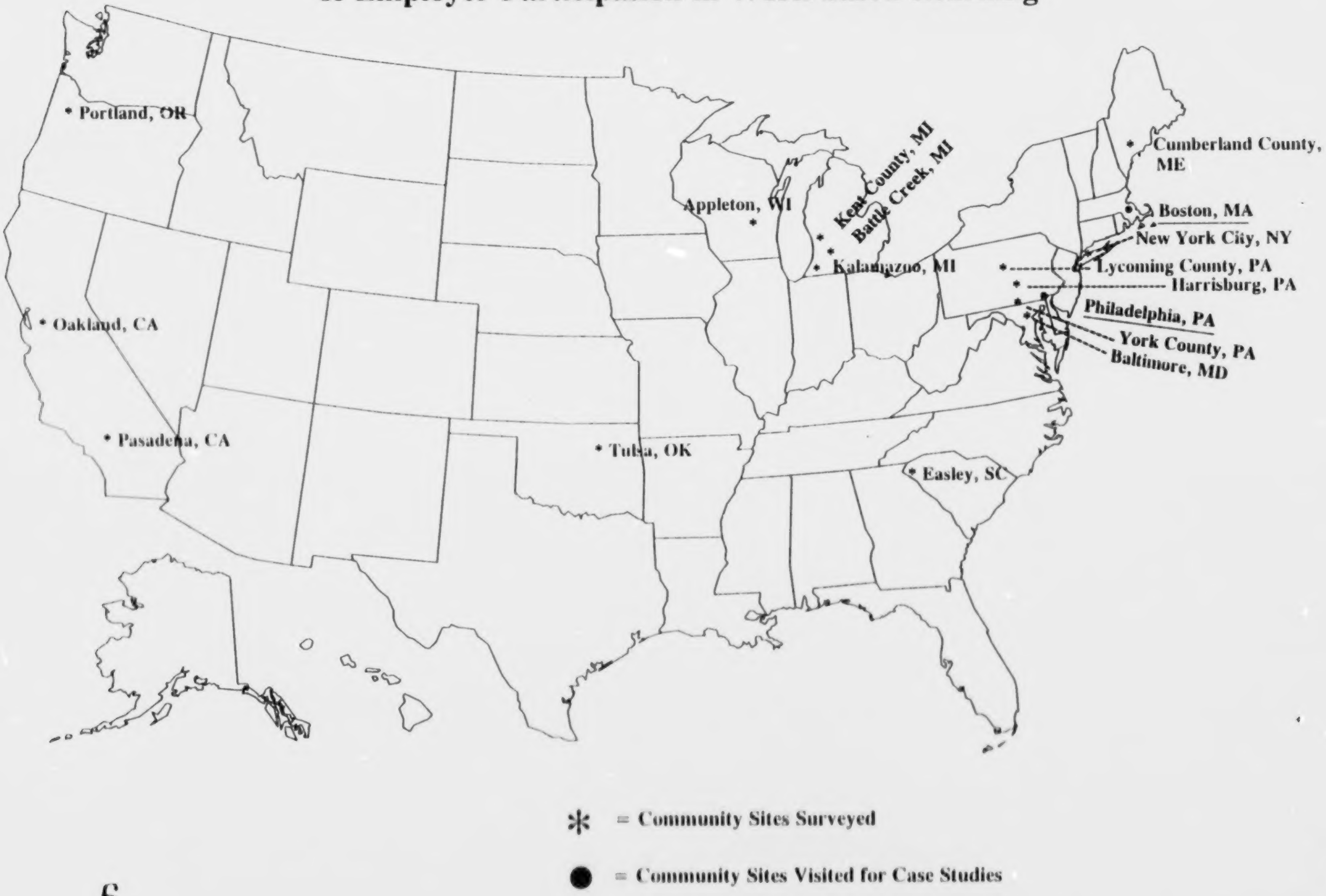
Portland, OR
Oakland, CA
Pasadena, CA
Tulsa, OK
Appleton, WI
Kent County, MI
Battle Creek, MI
Kalamazoo, MI
Cumberland County, ME
Boston, MA
New York City, NY
Lycoming County, PA
Harrisburg, PA
Philadelphia, PA
York County, PA
Baltimore, MD
Easley, SC
* = Community Sites Surveyed
● = Community Sites Visited for Case Studies

Exhibit 2
Communities Contacted for Study of Employer Participation in Work-based Learning

Program	Program Model	Industry Areas	Number of Employer Interviews		
			C	F	N
Metropolitan Vocational Center Little Rock, AR[1]	(Unknown)	(Unknown)	--	--	--
King Drew Medical Magnet High School Los Angeles, CA	Other	Health Fields	--	--	--
Oakland Health & Bioscience Academy Oakland, CA	Academy	General Focus	3	1	1
Pasadena Graphic Arts Academy Pasadena, CA	Youth Apprenticeship	Printing/Graphic Arts	3	1	1
Professional and Career Experience Program (PACE) Fort Collins, CO	Youth Apprenticeship	Health Fields Service/Retail Other (Automotive, Technology/Computers	--	--	--
Southern Maine Region Youth Apprenticeship Program Cumberland County, ME	Academy	General Focus	3	1	1
Baltimore Academy of Finance Baltimore, MD		Financial/Banking Service/Retail	3	1	1

C = Current employer participant of work-based learning
F = Former employer participant of work-based learning
N = Employer nonparticipant of work-based learning

[1] Industry focus in Little Rock is unknown since interview never took place

Exhibit 2 (Continued)

Program	Program Model	Industry Areas	Number of Employer Interviews		
			C	F	N
Calhoun Area Technical Center Battle Creek, MI	Youth Apprenticeship	Health Fields Manufacturing Service/Retail Other (Cereal industry, Automotive Mechanics)	2	2	1
Education for Employment Kalamazoo, MI	Youth Apprenticeship	General Focus	6	1	1
Kent Career/Technical Center Kent County, MI	Youth Apprenticeship	Manufacturing Service/Retail	3	1	1
Saginaw, MI	Youth Apprenticeship	General Focus	--	--	--
Academy of Finance New York, NY	Academy	Financial/Banking	3	--	2
Cornell Youth Apprenticeship Demonstration Project Broome County, NY	Youth Apprenticeship	Banking/Finance Health Fields Manufacturing Service/Retail	--	--	--
Dauphin County Technical School Harrisburg, PA	Other	Manufacturing Service/Retail	3	2	--
Industrial Modernization Center Lycoming County, PA	Youth Apprenticeship	Financial/Banking Health Fields Manufacturing Service/Retail	5	2	--

Exhibit 2 (Continued)

Program	Program Model	Industry Areas	Number of Employer Interviews		
			C	F	N
York County Area Vo-Tech School York County, PA	Youth Apprenticeship	Manufacturing	3	--	2
Craftsmanship 2000 Tulsa, OK	Youth Apprenticeship	Health Fields Manufacturing Other (Aerospace, Transportation)	3	1	1
Partnership Project Portland, OR	(Unknown)	Financial/Banking Health Fields Manufacturing Service/Retail Other (Utilities)	3	2	--
Pickens County Youth Apprenticeship Program Easley, SC	Youth Apprenticeship	Financial/Banking Health Fields Manufacturing Other (Automotive Technology)	3	2	1
Socorro High School for the Health Professions El Paso, TX	Academy	Health Fields Service/Retail	--	--	--
Fox Cities Education for Employment Council Appleton, WI	Youth Apprenticeship	Financial/Banking Printing/Graphic Arts Other (Automotive Technology)	4	2	--
Northwest Wisconsin CEP	(Unknown)	General Focus	--	--	--

Exhibit 3

Target Industry Fields of Programs Surveyed

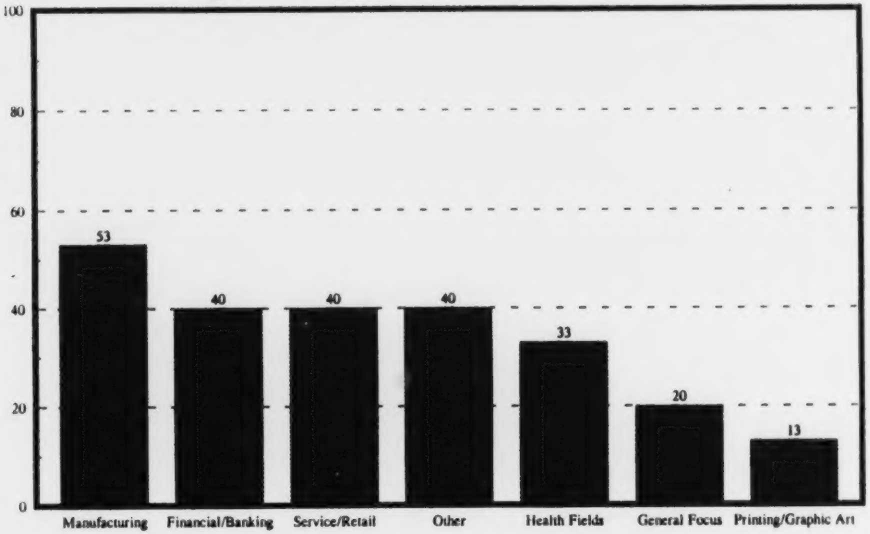

Chart reads: 53 percent of the work-based learning programs surveyed targeted manufacturing.

Other includes: Cereal industry, automotive mechanics, technology, aerospace, transportation, and utilities.

Most programs targeted more than one industry field (see chart below).

Exhibit 4

Number of Industry Focus Areas of Programs Surveyed

Number of Focus Areas	Programs
1	3
2	3
3	1
4	3
5	2
General Focus	3

3, and 4). The programs were intended to be different from one another, in terms of model, maturity, size, and scale. Once contacted, these coordinators were screened further to see if their programs provided:

- A work plan for students that details their work experience
- At least 50 hours per year per participant of work-based learning experiences
- Some sponsoring entity (e.g., the school, a district) as part of the program
- Some sort of designated school or workplace mentor or supervisor who is assigned to participants (either one-to- one or as a group)

We did not conduct complete interviews with coordinators of programs that did not meet these four minimum criteria. Of the 21 site coordinators originally contacted, 16 indicated that their programs met the four criteria. As Exhibit 1 illustrates, many of these programs are clustered in the Northeast region of the country. As Exhibit 2 indicates, a majority (12) follow a youth apprenticeship model. Five follow an Academy model. It is unknown how many incorporate Tech Prep into their programs, but several appear to have elements similar to Tech Prep. Several programs are located in vocational/technical schools. In some of the programs, the model is either unknown or follows a combination of several approaches. PSA interviewed the 16 program coordinators to gather information on the following factors:

- Background/history of work-based learning in the community
- Methods used to recruit employers
- Approximate numbers of students currently involved in work-based learning experiences per participating employer and numbers of students involved three years ago
- General sense of the community (e.g., number of businesses in the area, labor market focus, demographics, PIC activities)
- Perceptions of barriers to and/or incentives for employer participation in work-based learning programs

(See Appendices B and C for charts of the survey results and a copy of the coordinator survey guide.)

Within the communities surveyed, 85 percent of program coordinators indicated that their regional economy was growing somewhat. Sixty-four percent characterized their region's economy as "growing slowly," and 21 percent as "expanding rapidly." Fourteen percent said their economies were "flat," and none characterized their economy as "declining."

We used program coordinators as the contact source for employers to survey in their area. Three groups of employers were sought: (1) employers currently involved in work-based learning program(s); (2) employers who have participated in the past, but are currently not involved; and (3) employers who were invited to participate, but declined. Definitions for the three categories of employers are as follows:

- Current participants: Employers who have been involved in a work-based learning project for at least their second school year. All but two employers in this category had been involved in a work-based learning project for at least a third school year. Four were participants in work-based learning projects other than the project that referred us to them.
- Former participants: Employers who had participated earlier but were not currently involved in work-based learning projects at the time of our call with no definite plans to participate in work-based learning in the future.
- Non-participants: Employers recruited by the project, but who made a decision not to participate.

Each coordinator provided contact information for at least five employers--three employers currently participating in their work-based learning programs and two employers who were either former or non-participants in their programs.

Surveys of employers in communities. Using the employer contacts provided by project coordinators, PSA surveyed these employers to determine:

- The reasons for employer involvement or uninvolvement in work-based learning
- Patterns of growth or decline of employer involvement over time
- Correlation of these patterns of employer involvement with strategies employed to recruit their involvement

(See Appendices B and C for charts of the survey results and the employer survey guide.)

Overall, 37 percent of the employers in our sample were either former or non-participants in work-based learning (see Exhibit 5).

Exhibit 5

Employers Surveyed

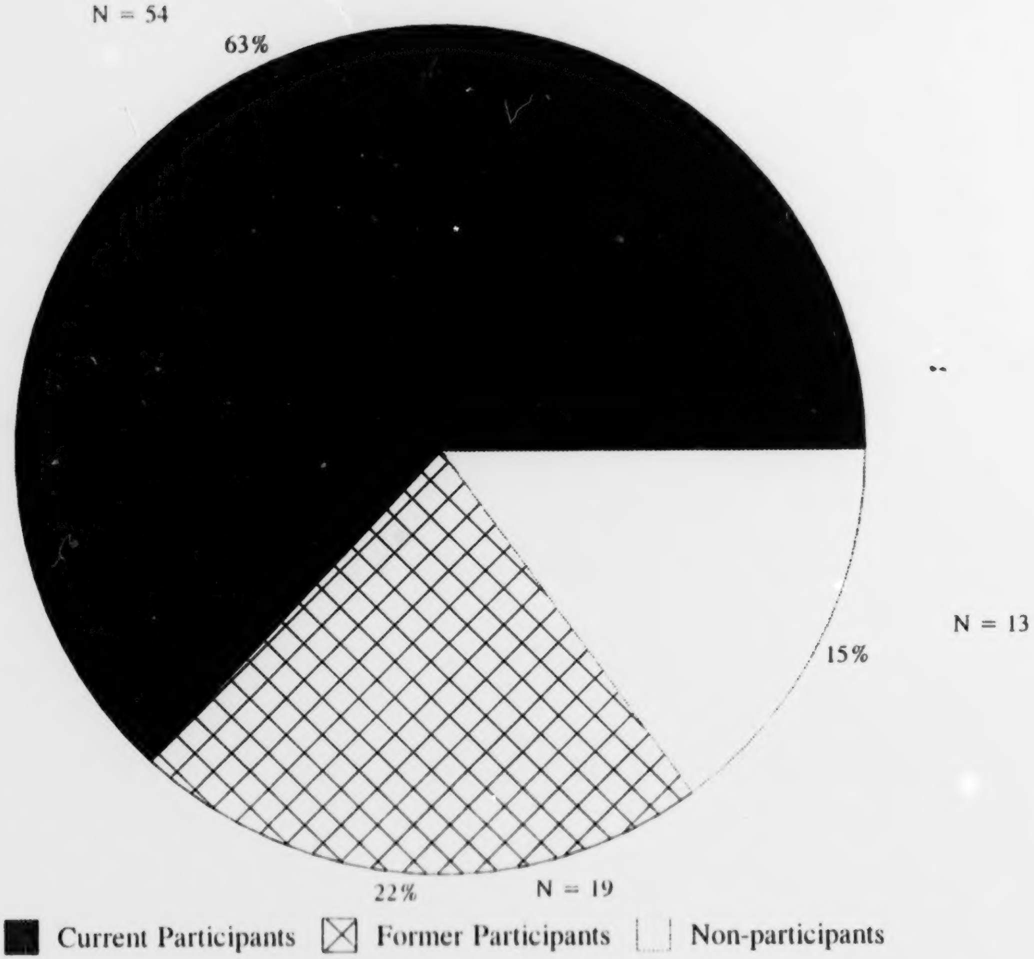

Chart reads: 63 percent of all employees surveyed were current participants of work-based learning.

Questions asked of current and former employer participants varied only slightly from those asked of non-participants. However, we did not ask non-participants about incentives for participating in work-based learning.

Structure of Report

The body of this report is divided into five chapters. Chapter II discusses the incentives and disincentives for participation in work-based learning programs based on the survey data from employers and program coordinators. Chapter III examines employer participation in work-based learning over time, and includes general trends in employer participation based on the employer and program coordinator survey data and analysis of case study sites. Chapter IV discusses the roles of coordinating entities in recruiting employers and providing program support for participating employers. Chapter V discusses the implications for the willingness of employers to participate in work-based learning and the implications for expanding work-based learning opportunities in the future. The Appendices contain several items:

- Case studies on the work-based learning programs in Boston and Philadelphia (Appendix A)
- Charts detailing aspects of survey data (Appendix B)
- Survey instruments used to interview project coordinators and employees (Appendix C)
- Detailed analyses of incentive and disincentive survey results from employers (Appendix D)

II. Incentives and Disincentives Affecting Employers' Participation in Work-based Learning

This chapter explores results from a survey of 86 employers about incentives and disincentives to participation in work-based learning (see Appendix C for survey instrument).[1] It discusses the findings on these issues based on an overall employer response rate as well as examines employers' responses based on groupings of employers by participation levels--current, former, and non-participants in work-based learning.[2] It is important to recognize that 63 percent of the surveyed employers are current participants of work-based learning; therefore, results of all employers collectively are biased toward those who currently participate (see Exhibit 5, previous chapter).

We have chosen to analyze the results of the employer survey in two ways. First, employers were asked to identify the single, most influential incentive and disincentive for their organizations' participation in work-based learning. The answer to this question forms the basis of our determination as to which incentive or disincentive factor is most important to the largest percentage of employers. Second, we analyze the results of employers' ratings of each individual incentive and disincentive on a scale of one to four--or "not a factor," "minor factor," "strong factor," or "major/primary factor" in their decisions about participation in work-based learning. Because of the large number of individual incentive and disincentive factors in the survey, we have further grouped these factors into broad categories of incentives and disincentives, which are discussed below.

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[1] It is important to consider that the survey results presented here are based on a very small sample of employers--the names of whom were given to us by work-based learning program coordinators. The employers surveyed for this study had to have made an active decision to--or not to--participate in the program. The likelihood that a coordinator would pass on a name of an employer who was strongly against work-based learning is questionable. Furthermore, a different sample that is more representative of employers of varying participation levels, industries, and sizes might better tease out some of the differences among employers and could yield stronger results.

[2] Included in the appendix are analyses of three further groupings of employers based on (1) broad industry types--manufacturing-related industries and service-related industries; (2) specific industry types; and (3) organizational size (e.g., numbers of employees)--large, mid-sized, and small organizations. While analysis of this type can be interesting, the authors of this report believe that, due to the size and nature of the sample, the most conclusive and significant results are in the analysis of overall employers and employers by level of participation.

Although a study of this size cannot offer definitive answers to research questions, the findings from these survey data on incentives and disincentives to employer participation in work-based learning suggest patterns of responses to the following questions: (1) Are programs of work-based learning designed to meet employers' primary needs? (2) To what extent does meeting these primary needs correlate to continued employer participation? (3) To what extent do the incentives employers associate with their organization's participation in work-based learning outweigh what they perceive as disincentives? The analyses of incentives and disincentives that follow should be viewed as a springboard for future research.

Incentives for Participation in Work-based Learning

Overall, employers surveyed for this study cited a wide variety of incentives for their organization's participation in work-based learning.[3] To analyze the results, we categorized these incentives into broader groups, which include: (1) desire to attract new employees; (2) desire to contribute to the improvement of education and the community; (3) desire to reduce the costs of recruiting new employees; and (4) opportunity to make improvements within the organization. These categories and corresponding survey results are discussed in detail below.

Desire to attract new employees. According to survey results, incentives related to "opportunities to attract future employees" are the most important reasons that employers participate in work-based learning. Incentives that we have grouped to form this category are:

- Concern about current or future shortages in labor due to growth or changing technology
- Opportunity to train future employees
- Need for higher skilled entry-level workers
- Current labor shortage
- Good way to attract minorities to the organization
- Opportunity to attract young workers for organization's aging workforce
- Good way to attract women to the organization

---

[3] The 13 surveyed employers who were non-participants in work-based learning were not asked questions concerning incentives. However, this group was asked questions about disincentives.

When asked to identify the single incentive that most influences their organization's decision to participate in work-based learning, 61 percent of the employers identified incentives related to "opportunities to attract future employees" as their organization's number-one benefit of participation (see Exhibit 6 below). Indeed, the four top ranked motivations were from this category. They are:

(1) Concern about current or future shortages of skilled labor due to growth or changing technology (15 percent)

(2) Opportunity to train future employees (15 percent)

(3) Need for higher skilled entry level workers (12 percent)

(4) Current labor shortage (10 percent)

In terms of rating individual incentives as "not a benefit," "minor benefit," "strong benefit," or "primary benefit" of work-based learning participation, 63 percent of employers cited incentives included in the broad categorization of "opportunity to attract future employees" as falling within the top two ratings (see Exhibit 7 below). This percentage is smaller than the percentage of employers rating the broad category "desire to contribute to the improvement of education and the community" as a "strong benefit" or "primary benefit" of participation (72 percent). However, more employers gave "attracting future employees" incentives the highest rating of "primary benefit" than they did "contributing to improvement of education and the community" (24 percent versus 20 percent, respectively).

Most employers do not view opportunities for recruiting women and minorities to the organization as important in terms of affecting their participation in work-based learning; however, for a few organizations (about 13 percent of those surveyed), these factors are very important. Regardless, no employer rated either of these factors as their organization's number-one incentive to participate.

Exhibit 6
Primary Importance of Broadly-Grouped Incentives to Employer Participation in Work-based Learning[4]

Incentive Rated Number 1 in Importance for Participation in Work-based Learning	Total Employers Surveyed (Current and Former Employer Participants) (N = 73)	Current Employer Participants (N = 54)	Former Employer Participants (N = 19)	Employer Non-Participants (Question not asked)
Desire to Attract New Employees	61%	55%	75%	N.A.
Desire to Contribute to the Improvement of Education and the Community	25%	28%	10%	N.A.
Method of Reducing Labor Costs by Recruiting New Employees	5%	6%	5%	N.A.
Opportunity to Make Improvements within the Company	0%	0%	0%	N.A.

---

[4] Percents do not sum to 100% due to rounding and due to the elimination of some factors that proved to be inconclusive. See Appendix B for ratings of individual incentive factors.

Exhibit 7
Employer Respondents Who Cited Incentive[5] as "Strong" or "Primary" Benefit for Participation in Work-based Learning

Incentives (Grouped Broadly)	All Employers	Current Employers	Former Employers	Non-participants
Desire to Contribute to the Improvement of Education and the Community	73%	76%	64%	N.A.
Desire to Attract New Employees	63%	64%	61%	N.A.
Opportunity to Make Improvements within the Company	48%	46%	57%	N.A.
Method of Reducing Labor Costs by Recruiting New Employees	45%	40%	62%	N.A.

Desire to contribute to the improvement of education and the community. According to survey results, employers' "desire to contribute to the improvement of education and the community" is the second most influential benefit of participating in work-based learning. We grouped the following individual incentive factors to form this broadly-defined category:

- Desire to become involved in school improvement
- Concern about the quality of education
- Opportunity to make an organizational investment in the community
- Opportunity to network with schools
- Creation of community good will
- Contributes to organization's positive image in the community
- Desire to contribute to an effort supported by other employers

---

[5] These percentages were derived from the numbers of employers answering in the two highest rating categories for each incentive. These individual incentives were then grouped into broad incentive categories.

Among the incentives within this broad classification, "concern about the quality of education," "desire to become involved in school improvements," "opportunity to network with schools," and "opportunity to make an organizational investment in the community" are perceived as being the strongest benefits to participation in work-based learning. Specifically, employers rated goals of investing in the community and improving education as being somewhat more important than goals of creating a positive image for the organization and creating community good will--the latter of which primarily benefits the organization. In fact, "concern about the quality of education" and "desire to become involved in school improvements" were tied for fifth place as incentives that, for 7 percent each of employers surveyed, were the single, most important benefit for participation in work-based learning.

Looking across all four broad classification of incentives, the largest proportion of employers--73 percent--rated factors associated with educational community improvement as either a "strong benefit" or "primary benefit" of participating in work-based learning (see Exhibit 7 above). However, more employers rated these types of incentives as "strong benefits" than they did as "primary" ones (53 percent versus 20 percent, respectively). Only 25 percent of employers cited factors within this category as being the number-one influence affecting their organization's participation in work-based learning (see Exhibit 6 above).

Desire to reduce the costs of recruiting new employees. According to survey results, "a desire to reduce the costs of recruiting new employees" is the third most influential benefit to employer participation in work-based learning. We created this category by combining the following incentives:

- Opportunity to observe or "try out" potential employees
- Opportunity to offset costs by receiving prescreened potential employees
- Some labor costs are offset if positions are subsidized

Five percent of all employers surveyed cited incentives within this broad classification as being the number-one benefit to their organization for participating in work-based learning (see Exhibit 6 above).

Two of the individually rated incentives within this broad category proved to be relatively unimportant for a majority of employers. Eighty-five percent of employers rated "offsetting labor costs if positions are subsidized" as either "not a benefit" or "minor benefit." Sixty percent rated "receiving prescreened potential employees" as either "not a benefit" or "minor benefit." On the other hand, 60 percent of employers rated "opportunity to observe or 'try out' potential employees" as either a "strong benefit" or "primary benefit" of participation in work-based learning. Such a finding implies that direct savings to employers through participation in work-based learning is of relatively minimal importance; however, future savings gained by trying out and hiring the best workers appears to be more valuable to a substantial proportion of employers.

Opportunity to make improvements within the organization. According to survey results, work-based learning as "an opportunity to make improvements within the organization" is the least influential benefit to employer participation of the categories we created. To form this category, we combined the following incentives:

- Opportunity to provide professional development to current employees
- Opportunity for employers to re-examine their organization's training

No employer cited either of these potential benefits as the single, most influential benefit for participation in work-based learning (see Exhibit 6 above).

When rated individually, employers overall placed a slightly higher value on "opportunity to provide professional development to current employees" than they did on "re-examining their organization's training." Over half (53 percent) rated the professional development incentive as either a "strong benefit" (10 percent) or "primary benefit" (43 percent) of participation. Less than half (44 percent) rated re-examination of training as a "strong benefit" or "primary benefit."

Potential benefits that employers identified as non-issues. Overall, employers rated a majority of the incentives listed on the survey as a "strong benefit" or "primary benefit" for participation in work-based learning. One exception was the incentive to "offset labor costs if positions are subsidized." Most (62 percent) of the surveyed employers rated this incentive as "not a benefit" to participation in work-based learning.

Differences between current and former employers in terms of incentives. Because the overall sample of employers is comprised predominantly of current employer participants--63 percent--responses of all employers and current employers are similar. However, when we compare the responses of current and former employer participants in work-based learning programs, there are three key differences between the two groups:

- ***Former participants are more strongly oriented to attracting new employees than are current participants:*** The finding that "desire to attract new employees" is the strongest incentive for employers holds true for both current and former participants of work-based learning; however, for former participants, it is even stronger. Seventy-five percent of former participants identified incentives related to "attracting future employees" as their organization's number-one incentive for participating in work-based learning, contrasted with 57 percent of current employer participants. Most notable in the distinction is the individual incentive factor "opportunity to attract young workers for organization's aging workforce": while 11 percent of former participants rated this factor as the number-one incentive to participate, no current participants rated this factor as number-one.

- ***Former participants also are somewhat more motivated by the incentive "desire to reduce the costs of recruiting new employees" than are current participants***. While only a minority (40 percent) of current employer participants rated incentives within this category as a "strong benefit" or "primary benefit," 62 percent of former participants rated incentives related to "reducing labor costs by recruiting new employees" strongly.

- ***Current employers are somewhat more strongly oriented to the community than are former participants***: Twenty-six percent of current employer participants cited incentives related to "desire to contribute to the improvement of education and the community" as the number-one benefit of participation; 10 percent of former employer participants rated these type of incentives as the number-one incentive to participate in work-based learning.

Although the sample size in this survey is small, these findings suggest that employers who have discontinued participation in work-based learning are different from employers who currently participate. If these findings are valid, they have important implications for the expansion of employer involvement in work-based learning. Wide-scale expansion may depend upon employers' willingness to see participation in work-based learning as a worthwhile social investment. What remains to be determined is the value placed on social benefits by non-participating employers, who were not asked questions concerning incentives in this survey.

Disincentives for Participation in Work-based Learning

While employers identified a majority of the potential incentives for participation listed on the survey as benefits that affect their organizations' decision to participate in work-based learning, a much lower proportion identified the potential disincentives in the survey as strong or major factors affecting their organizations' decisions.

As with incentive factors, employers were asked to rate a series of disincentives to participation in work-based learning on a scale of one to four. Unlike the responses for incentives, employers rated most of the disincentives as having little influence over their decision of whether or not to participate in work-based learning. Only two disincentives--uncertain economic climate (24 percent) and organizational changes within the business (22 percent)--were identified as "strong" or "major" factors affecting their organizations' participation by more than 20 percent of the survey sample. This finding may be explained, in part, by the fact that a majority of our sample consisted of current participants (63 percent) who, presumably, are supporters of work-based learning. Also, regardless of whether or not the organization participated in work-based learning at the time of our call, many of our employer contacts were admittedly work-based learning supporters and in positions--such as human resource departments, in larger organizations--of selling the concept of work-based learning participation to the CEO of the organization. Supporters tend to focus on benefits and minimize drawbacks.

As we did with the incentive factors, we categorized the individual disincentive factors into broad groups, which include: (1) employer-related factors; (2) work-based learning program-related factors; and (3) economic uncertainty. These broad groupings are discussed in detail below.

Employer-related factors. Factors related to employers present the strongest barriers to work-based learning participation, according to the survey. We formed this relatively large category by collapsing the following individual potential disincentives:

- Too much time required
- Organizational changes within the business
- Student trainee may accept a position with a competitor company
- Opposition of organized labor
- Internal opposition of workers
- Worker's compensation insurance issues
- Lost productivity of workers involved
- Concerns about possible violations of child labor laws
- Concerns about possible violations concerning OSHA

One-third of all employers rated one of these individual potential disincentive factors related to the employer as being the number-one factor influencing their organization against participating in work-based learning (see Exhibit 8 below). However, only 13 percent of all employers rated these factors as "strong" or "major" disincentives (see Exhibit 9 below).

Exhibit 8
Primary Importance[6] of Broadly-Grouped Disincentives to Employer Participation in Work-based Learning[7]

Disincentive Rated Number 1 in Importance for Participation in Work-based Learning	Total Employers Surveyed (Current and Former Employer Participants) (N = 76)	Current Employer Participants (N = 49)	Former Employer Participants (N = 15)	Employer Non-Participants (N = 12)
Employer-related Factors	33%	26%	48%	58%
Program-related Factors	30%	36%	27%	8%
Economic Uncertainty	9%	8%	13%	8%

Exhibit 9
Employer Respondents Who Cited Disincentive[8] as "Strong" or "Major" Influence Affecting Decision to Participate in Work-based Learning

Disincentives (Grouped Broadly)	All Employers	Current Employers	Former Employers	Non-participants
Economic Uncertainty	24%	19%	37%	25%
Employer-related Factors	13%	12%	11%	22%
Program-related Factors	11%	11%	15%	11%

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[6] N reflects the number of valid responses to the question "What is the single, most important potential disincentive that your organization considered in deciding whether or not to participate in work-based learning?" Some employers would not answer this question.

[7] Percents do not sum to 100% due to rounding and due to the elimination of some factors that proved to be uninterpretable. See Appendix B for ratings of individual disincentive factors.

[8] These percentages were derived from the numbers of employers answering in the two strongest rating categories for each disincentive. These individual disincentives were then grouped into broad disincentive categories.

Most important among these individual disincentives are factors related to opposition to work-based learning within the company. Sixteen percent of all employers rated "organizational changes within the business," "opposition of organized labor," and "internal opposition of workers" as "strong influences" (11 percent) or "major influences" (5 percent) affecting their decision. Running a close second to internal opposition are issues of lost productivity. Fourteen percent of all employers rated "lost productivity of workers involved" or "too much time required" as "strong influences" or "major influences."

Work-based learning program-related factors. According to survey results, factors related to work-based learning programs, themselves, are important disincentives to participation for some employers. We grouped the following potential disincentive factors to form this broad category:

- Concern about reliability of students
- Cannot always rely upon getting student participant on regular basis
- Too much bureaucracy of school system
- Lack of technical assistance or troubleshooting from program
- Lack of flexibility in program model
- Prior, unsuccessful experiences with students in work-based learning
- Availability of higher-qualified workers at same cost as hiring students
- Lack of effective program organization/administration
- High school students aren't sufficiently productive in the organization
- Lack of technical assistance or troubleshooting from program

Thirty percent of all employers surveyed cited program-related factors as the number-one disincentive working against their organization's participation in work-based learning (see Exhibit 8 above). However, only 11 percent of all employers felt strongly about this factor (see Exhibit 9 above).

Chief among individual, program-related, potential disincentives are (1) concerns about student reliability and (2) the fact that employers cannot always rely upon getting a student participant on a regular basis. Twelve percent of all employers rated "concerns about student reliability" as the number-one disincentive factor working against their organization's participation in work-based learning. Furthermore, 17 percent of employers rated this disincentive as a "strong influence" (12 percent) or "major influence" (5 percent) affecting their organization's decision to participate. Similarly, 11 percent rated problems associated with reliability of regularly getting a student participant as the number-one disincentive factor. Nineteen percent of employers rated this disincentive as a "strong influence" (15 percent) or "major influence" (5 percent) affecting their organization's decision to participate. Another frequently cited disincentive factor is school systems' bureaucracy. While only 3 percent of employers cited this disincentive as being the number-one factor working against their organization's participation in work-based learning, 19 percent rated the factor as a "strong influence" (13 percent) or "major influence" (6 percent) on their organization's participation.

These findings indicate that two important factors in employers' participation are ensuring both program and student reliability and minimizing bureaucratic hassles associated with the program.

Issues concerning economic uncertainty. A third reason employers cite as a disincentive for participating in work-based learning is economic uncertainty. Only one disincentive factor--"uncertain economic climate"--forms this broad category. Nine percent of all employers cited this as the number-one disincentive to participation in work-based learning (see Exhibit 8 above). However, when they rated each disincentive factor separately, 24 percent of employers cited "uncertain economic climate as a "strong influence" (20 percent) or "major influence" (4 percent) affecting their organization's participation in work-based learning--the highest such rating of any individual disincentive factor (see Exhibit 9 above).

Potential disincentives identified as non-issues. In general, employers rated most of the potential disincentive factors as not major influences affecting their organization's decision to participate in work-based learning. In fact, among these factors are several that nearly three-fourths of all employers cited as being non-issues.

- ***Employer-related factors*:** Least important among these potential disincentives are factors related to increased insurance and regulatory costs. About three-fourths of all employers rated these factors as "does not affect decision." Three-quarters of employers also rated "student trainee may accept a position with a competitor company" as "does not affect decision." Finally, 81 percent of employers cited "opposition of organized labor" as "does not affect decision," which may reflect a more general decrease in the influence of organized labor in business and industry.

- ***Program-related factors*:** While some employers are very concerned about student reliability, about three-quarters of them rated "availability of higher-qualified workers at same cost as hiring students," "prior, unsuccessful experiences with students in work-based learning," and "high school students aren't sufficiently productive" as non-issues in their decision to participate in work-based learning programs. Over 70 percent also rated "lack of effective program organization or administration" as a non-issue.

Differences between current, former, and non-participants in terms of disincentives. A comparison of responses concerning disincentives to participation among current, former, and non-participant employers indicates several distinctions between the groups. These are explored below:

- ***The further removed from participation in work-based learning programs employers are, the more strongly they consider issues that are employer-related to be disincentives***: The finding that 33 percent of all employers surveyed consider employer-related factors as the number-one disincentive working against their organization's participation in work-based learning increases in importance as the level of employer participation is more removed: in other words, former participants feel that employer-related factors are more of a disincentive than do current participants, and non-participants feel these factors are more of a disincentive than do either of the other two groups (see Exhibit 8 above). Twenty-two percent of the non-participants surveyed rated employer-related factors as either "strong influences" or "major influences" against participating--a percentage that is twice that of any other group surveyed (see Exhibit 9 above).

- ***Uncertain economic environment is somewhat more important for former and non-participating employers than for current participants***: While 19 percent of current participants rated "uncertain economic climate" as a "strong influence" or "major influence," 37 percent of former employer participants and 25 percent of employer non-participants rated this potential disincentive factor as important (see Exhibit 9 above).

- ***Formerly participating employers are more concerned about organizational changes within the business***: Over one-fourth of all former employer participants rated the individual potential disincentive factor "organizational changes within the business" as the number-one disincentive working against their organization's participation in work-based learning. Only 4 percent of current participants and 8 percent of employer non-participants rated this factor as number-one. This suggests a possibility that former participants might once again participate when their organizations achieve a new stability.

- ***Opposition of unions is a stronger factor for employer non-participants***: One-quarter of the employer non-participants identified "opposition of organized labor" as the single, most influential disincentive factor. No former employers and only 2 percent of current employers cited this factor as being number-one. In fact, 81 percent of current participants and 84 percent of former participants cited this factor as "does not affect decision" to participate. While three-fourths of employer non-participants agreed that "opposition of organized labor" does not affect the organization's decision of whether or not to participate in work-based learning, 25 percent of this group cited organized labor opposition as being either a "strong influence" (8 percent) or "major influence" (17 percent) against participating, as compared to only 9 percent of former participants and 5 percent of current participants.

- ***The issue of student reliability is a stronger disincentive for former participants and employer non-participants than for currently participating employers*:** While only 13 percent of current participants cited this factor as either a "strong influence" or "major influence," 22 percent of former participants and 27 percent of employer non-participants cited the factor as important.

- ***Former participants are more concerned about certain issues concerning the structure and processes of work-based learning programs:*** While only 7 percent of current participants rated "cannot always depend on getting a student participant" as a "strong" or "major" disincentive, 32 percent of former participants rated the disincentive as important. Similarly, 11 percent of former participants identified "lack of technical assistance or troubleshooting" as a "strong" or "major" influence, compared to only 4 percent of current participants.

- ***The further removed from work-based learning participation, the more likely the employer is to consider program flexibility to be a disincentive*:** Only 6 percent of current participants rated "lack of program flexibility" as a "strong" or "major" disincentive. In contrast, 16 percent of former participants and 36 percent of employer non-participants identified this factor as important in influencing their organization's decision not to participate.

In summary, employers identified more incentives than disincentives for participating in work-based learning. The majority of employers surveyed cited broad-group incentives concerning "a desire to attract new employees" as the number-one benefit to the organization of participating in work-based learning. These types of incentives are less important to current participants of work-based learning than they are to employers who formerly participated. Benefits concerning "desire to contribute to the improvement of education and the community" are somewhat more important to current participants than they are to former employer participants. In contrast, former participants are somewhat more motivated by reducing labor costs through recruiting new employees as a benefit of participation in work-based learning than are current participants. In general, employers consider incentive factors related to "opportunity to make improvements within the company" and "desire to reduce costs of recruiting new employees" as less important than either attracting new employees or improving education and the community. Offsetting labor costs is not perceived to be a benefit of participation in work-based learning.

Overall, employers rated few disincentives as important in dissuading their organization from work-based learning participation. Those disincentives that proved to be the most important concerned employer-related factors, such as time and organizational changes. However, about one-third of the respondents also had concerns about programmatic issues, such as reliability of students, school system bureaucracy, and lack of technical assistance from the work-based learning program. While economic uncertainty ranked third as a primary discouragement to participation in work-based learning, one-quarter of all employers--the largest such proportion for a single disincentive--cited this factor as being very important. The distinctions among groups of employers of varying participation levels are more striking for disincentive factors than for incentive factors.

Although the primary purpose of this study is to portray and analyze the incentives and disincentives associated with employer participation in work-based learning, the study also yielded information regarding other, related matters. These issues are discussed in the following chapters.

III. Employer Participation in Work-based Learning Over Time

Trends over Time

In terms of program participants--both employers and students--the 15 surveyed program coordinators indicated a healthy expansion of programs over the past three years. Two of the 15 programs--Kent County and Kalamazoo, Michigan--provide examples of ones that have successfully taken their models to scale in terms of both employers and students (see "Going to Scale" box below.)

Going to Scale: Kent County and Kalamazoo, Michigan

Kent County and Kalamazoo, Michigan--two of the 15 sites surveyed for the study--have successfully recruited employers to participate in work-based learning and, as a result, have included significant numbers of students in their programs.

Highlights of the Two Programs

Kalamazoo. In 1985, the nine school districts in Kalamazoo County and the Kalamazoo Valley Community College formed the Kalamazoo Valley Consortium/Education for Employment Council (EFE) to help county students "maximize their employment potential and their contribution to the economic development of Kalamazoo County." Three years ago, the program had 140 employers involved; today, approximately 370 employers participate in EFE's work-based learning programs. Of these employers, 200 provide mentoring experiences, 100 offer cooperative education experiences, 20 offer youth apprenticeship slots, and 50 provide other work-based learning experiences.

Students across all nine public Kalamazoo County school districts have access to EFE programs in any county school district. In the 1992-93 school year, 3,695 students in grades 11 and 12 were enrolled in Kalamazoo County. Of those students, more than 1,800--nearly half--participated in EFE programs.

Kent County. The Kent County Career Technical Center provides vocational/technical assistance for students from Grand Rapids and its surrounding suburbs. Nearly 2,200 students from more than 40 public and private high schools are enrolled in 32 programs offered by the Center, which has operated work-based learning programs since 1989.

Today, the Center offers a sequence of work-based learning experiences. Junior high school students participate in mentorships with professionals in a field of their interest. In the ninth grade, they conduct two one-day visits to the center to learn about its programs. Students in grade 10 spend one day in the workplace as an intern. In grade 11, students participate in job shadowing; in grade 12, they have a paid work-based learning experience. Seniors spend an average of 18 hours per week in a work-based learning experience.

According to the work-based learning coordinator, as of the spring of 1995, approximately 2,070 employers are involved in some way with work-based learning programs at the center. This count includes employers who have served and/or are interested in serving as work-based learning sites, but do not currently have students in their workplace. This figure has increased from 1,200 employers who were involved three years ago.

Common Characteristics

While the two programs are unique, they share some common characteristics that may suggest reasons for their success.

Growing economies. Both coordinators characterized their local economies as expanding. According to Kent's work-based learning coordinator, the regional economy in the Kent County area is growing rapidly, and state officials anticipate that 70,000 people will move to this area in the next few years in search of employment. Manufacturing--the industry in which the program places many of its students--is the region's primary industry, providing 72,000 jobs. It is also the region's fastest growing industry. In Kalamazoo, the coordinator also reported that the economy is growing, although somewhat less rapidly than in Kent County.

In addition to regional economic strength, Michigan--where both Kent and Kalamazoo are located--is experiencing its lowest state unemployment rate (5.4 percent) in 22 years. There is job growth in every sector except government, and growth in personal income is twice that of the national average. As a result, many parts of the state are experiencing labor shortages and are more willing to hire students.

Diversified work-based learning options. Both programs offer sequences of experiences (e.g., job shadowing, mentoring, youth apprenticeship) that provide both students and employers an opportunity to "try out" the relationship at a number of ranges of commitment levels. Students have an opportunity to explore industries before they chose to enter into extensive work-based learning programs, such as youth apprenticeship. One could speculate, then, that the students with the most intense relationships with employers are those that are most committed to pursuing that line of work. Therefore, they may be more motivated to succeed. Similarly, employers are able to establish their own level of participation. As time progresses, they may chose to increase their level of participation and the intensity of their relationship with the program and its students.

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Age of programs. Another reason these two programs may have a high level of employer involvement is that, compared to other work-based learning programs, they are relatively older and more established. Kalamazoo's Education for Employment Program began in 1985; Kent County's program began in 1989. Both programs have had time to develop and expand. For example, in Kent County, the coordinator believes that the program's marketing plan to businesses has become more efficient since the program began. This coordinator noted that the time the program spent recruiting employers has decreased from 75 percent in 1989 to 20 percent during the 1994-95 school year. In Kalamazoo, EFE has institutionalized employer recruitment by establishing active advisory committees comprised of business and industry representatives.

Other issues. Only one of the two sites offer financial incentives to employers. Kent County provides employers with subsidies to cover worker's compensation. The coordinator does not think that any other incentives would increase the number of employer participants. The Kalamazoo coordinator believes that providing subsidies for employers who offer students unpaid work-based experiences for liability costs as well as tax incentives--neither of which his program offered--would increase the number of employers involved.

When surveyed, coordinators in both Kent and Kalamazoo identified too much bureaucracy in the school system, concerns about possible violations of child labor laws, and worker's compensation insurance issues as major influences affecting employers decisions to participate in work-based learning.

Eighty-seven percent of the surveyed coordinators answered that "employer participation is increasing"; 13 percent answered that "employer participation is remaining stable." Furthermore, four-fifths of the coordinators indicated that their programs have retained original employers and expanded the pool. In only one instance did a program coordinator indicate that the group of employers involved with the program has not expanded since the program began. As Exhibit 10 indicates, of the 15 work-based learning programs surveyed, most coordinators said that the number of employer participants has gradually increased over time. The median number of employers currently involved among the 15 work-based learning programs surveyed was 35 (with a range of six to over 2,000 employers involved in specific programs). Three years ago, coordinators estimated that slightly fewer employers were involved--the median number of employer participants per program in 1992-93 was 30.

Exhibit 10

Numbers of Employers Involved with 15 Work-based Learning Programs over Time

Measure	Approximate Number of Employers Involved Three Years Ago (1992-93)	Current Number of Employers Involved within 15 Communities	Approximate Number of New Employers That Have Begun Participating in Last Three Years	Approximate Number of Employers Approached over Last Three Years Who Decided Not to Participate	Approximate Number of Employers That Have Dropped Out in the Last Three Years
Median	23	35	23	14	5
Mean	600.5	1,035	1.001	15.5	25
Range	1-1,200	6-2,070	2-2.000	1-30	0-50
Percent of Coordinators Indicating Number Is Close to Exact	47%	73%	47%	43%	64%
Number of Programs with Missing Information	0 missing	0 missing	0 missing	2 missing	1 missing

The trend of increased employer participation also holds true in the case study sites. Since its inception, ProTech has steadily expanded into new industries and, therefore, has gradually increased the number of employers with which it works. As ProTech expanded into new industries, the number of employer participants within each industry also has increased. Part of this increase is due to a desire by businesses to keep up with industry leaders. Such was also the case in Philadelphia, where some employers chose to participate in work-based learning as a way to network with other employers in the area.

Additionally, as Exhibit 11 shows, all program coordinators indicated that the number of student participants also has been increasing. The median number of students per employer is nearly three; however, larger employers tend to take more students, as discussed in the next section.

Exhibit 11
Number of Student Participants in Work-based Learning Programs over Time

Measure	Number of Student Participants Per Program Three Years Ago	Number of Student Participants, Spring 1995--Per Program	Number of Planned Student Participants Per Program in 1995-96
Median	80	100	118
Range	6 - 1,200	19 - 1,500	30 - 1,700

Finally, employers who currently participate in work-based learning programs corroborated the coordinators' theories that the programs are expanding in size. As Exhibit 12 below indicates, employers reported a willingness to increase the number of slots for student participants over time.

Exhibit 12
Numbers of Student Participants Per Employer over Time

Measure	Number of Student Participants Per Employer Three Years Ago	Number of Student Participants Per Employer Spring 1995	Number of Planned Student Participants Per Employer in 1995-96
Median	2	2	3
Range	0 - 100	1 - 160	1 - 190

Program coordinators cited a number of reasons for the increase in employer participation. Half believed the increase, at least in part, was due to programmatic issues, such as better structure of the program, improved recruiting efforts, and increased advertising of the program. One-third felt that prior success stories, such as qualified program graduates, was a factor in the increased number of employer participants. Twenty percent cited growth in the economy and shortages of skilled labor as two factors for increases in employer participation. Several coordinators listed three other factors, including (1) the program provides a convenient outlet for businesses to work with schools; (2) the program has formed active advisory committees with business representatives who have significant input into program operations; and (3) the city or school district where the program was located began providing stipends.

Differences among Large-sized Employers of Offering Large Numbers of Student Slots

The survey found a direct, positive correlation between the number of employees at an organization and the number of work-based learning slots an organization is likely to offer (see Exhibit 13). The larger the number of employees at an organization, the larger the number of student work-based learning participants. In fact, large-sized employers were likely to offer more than 12 times the number of slots to work-based learning participants, compared to small-sized employers; mid-sized employers were likely to offer seven times the number of slots, compared to small-sized employers.

Exhibit 13

Student Participants Working at Organizations of Various Sizes

Measure	Small sized Employers--from 1-39 employees (N = 13)	Mid-sized Employers--from 40-232 employees (N = 18)	Large-sized Employers--324 or more employees (N = 23)
Total Number of Student Participants of the Group, 1995	22	215	468
Average Number of Student Participants of the Group, 1995	1.7	11.9	20.4

Such a finding has implications for scaling up programs. Programs that aim to place higher numbers of student participants should consider recruiting the largest employers in the area to participate in the program.

IV. Role of Coordinating Entities

As Chapter II and Chapter III have shown, employers are affected in many ways by the various incentives and disincentives associated with participation in work-based learning. However, survey results, telephone interviews with program coordinators, and analysis of the two case studies have shown the supporting roles of coordinating entities to be of critical importance to employers' participation as well. An effective coordinating entity can make or break the program's success in terms of employers' initial participation and continued satisfaction over time.

Coordinating entities of work-based learning programs often play an important role in assuring that programs are well-run and that they meet the needs of employers, schools, and students. The major roles of the coordinating entities are to attract, enroll, retain, and support employers for the work-based learning programs they operate. (See box on Boston and Philadelphia for examples of effective coordinating entities.)

Boston and Philadelphia: Examples of Coordinating Entities

Since its creation, the Boston PIC has served as the primary intermediary between the city's business community and its public school system. The PIC first began its relationship with the Boston Public School System in 1981, through its Jobs Collaborative program, which links students who have good educational achievement and attendance records with employment opportunities, including part-time, summer, and full-time jobs with area employers. In addition to the Jobs Collaborative, the PIC manages a summer jobs program for Boston high school students and coordinates partnerships between Boston schools and businesses. The PIC also served to broker the Boston Compact, an agreement initiated in 1982 between the Boston Public Schools, business leaders, area colleges and universities, and the Boston Building and Trades Union that set goals for each participant to improve education and employment opportunities for Boston high school students.

In 1991, the PIC established ProTech, a youth apprenticeship program that combines school- and work-based learning experience to prepare students for occupations in health care, financial services, utilities, and communications. For many employer participants in ProTech, the PIC is a familiar entity. Most employer participants have participated in other PIC programs, and several have had CEOs serve on the PIC board of directors. These employers exhibit a great deal of ownership in the ProTech program, much of it stemming from their involvement in the development of ProTech and their past involvement with PIC education and job programs.

In Philadelphia, two work-based learning programs exist--Education For Employment and the Philadelphia High School Academies. Each program has its own structure for coordinating interaction between the schools and employers. The High School Academies use Academies, Inc., an employer-funded entity distinct from the school district, to serve as an intermediary between employers and schools.

Academies, Inc. serves as the High School Academies' clearinghouse for job slots. Like the ProTech program, most Academy job slots are provided by employers who have had long-standing relationships with Academies, Inc.; consequently, strong relationships exist between employers and the individual Academy programs. For example, job developers--all of whom come from business backgrounds--work with employers and schools to develop curriculum and related work opportunities for students.

The Education For Employment (EFE) program--begun during the 1992-93 school year--does not use a separate coordinating entity that acts as an intermediary between the school district and employers. Instead, school district staff based in the district's Education For Employment Office function as the coordinators of EFE work-based learning activities.

Exhibit 14
Strategies That May Encourage Participation

Strategy	Strategy That Most Encourages Participation (All Employers; N = 86)[9]	Overall Attractiveness of Strategies (All Employers; N = 86)	Overall Attractiveness of Strategies (Current Employer Participants; N = 54)	Attractiveness of Strategies (Former Employer Participants; N = 19)	Attractiveness of Strategies (Employer Non-Participants; N = 13)	Availability of Strategies (Program Coordinators; N = 15)
Tax incentives	10%	54%	55%	42%	69%	20%
Wage subsidies	16%	57%	52%	58%	77%	33%
Subsidies to cover worker's compensation	11%	51%	49%	44%	59%	47%
Reimbursement for staff time spent training/ supervising students	7%	42%	43%	26%	62%	7%
An effective intermediary coordinator to provide trouble shooting and technical assistance	33%	69%	69%	63%	77%	93%

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[9] Employer non-participants were not asked this question.

Strategies That Encourage Employer Participation

Strategies coordinated by programs. Programs use a variety of strategies to encourage employers to participate in work-based learning (see Exhibit 14). When employers were asked to rate the attractiveness of some of these strategies, the availability of an effective intermediary coordinator to provide troubleshooting and technical assistance to employers was rated the most attractive in gaining employers' initial and on-going participation. Such strategies as tax incentives, wage subsidies, subsidies to cover worker's compensation, and reimbursement for staff time spent training/supervising students proved to be less popular among this group of employers than an effective go-between agency or individual.

Among five types of strategies that might be offered, the highest percentage of employers at all participation levels rated the availability of an effective program coordinator as most important in encouraging their organizations to participate. One possible explanation is that the effective coordination of a program demonstrates the program's understanding and appreciation of issues that are of concern to employers. The key issues appear to be the need for productivity and the value of staff time. Ninety-three percent of the program coordinators surveyed believed that their programs offer precisely the type of effective intermediary coordination that can provide troubleshooting and technical assistance functions for employers. The somewhat lower proportions (two-thirds to three-fourths) of employers in the various grouping who identified coordination as an attractive strategy suggest that the coordinators may be overestimating either the effectiveness or the visibility of their coordination efforts.

Employers rated financial incentives as less important to encouraging participation than smooth program operations. In fact, most of the employers surveyed considered the issue of money to be fairly unimportant in their organization's initial decision to participate or continue participation.

Tailoring the program model to employers' preferences. While the survey did not ask coordinators how their program model was selected, most programs use a model that employers say they prefer over others. When surveyed, only a very few employers rated "unpaid work-based learning" as desirable; most employers said they prefer a work-based learning model in which students receive credits toward school or registered youth apprenticeship and/or pay for their work--even when the funds came from employers themselves. Not surprisingly, none of the programs from the survey sites emphasized unpaid work-based learning. Instead, most programs emphasized extensive paid work-based learning over other models that might be considered less rigorous. At one program that sponsors only paid work experiences, staff mentioned that employers made a conscious choice to participate in their program over unpaid work-based learning models in the area.[10]

Recruiting Employers

Recruitment is ultimately the responsibility of the staff of the entity that coordinates a work-based learning program. The number of individuals involved in recruiting varies widely by program. For some programs, employer recruitment is a one-person show starring the program director, who assumes all recruitment responsibilities. In other programs, there is broader participation in recruitment from elaborate governing boards or steering committees comprised of employers, marketing experts, and industry liaisons. Interviews with coordinators suggest a great deal of variation among programs in how well employers and program coordinators know each other and in how often they communicate. In all cases, the coordinators are kept busy coordinating their work-based learning programs, often in addition to other duties unrelated to the program.

Coordinators of work-based learning programs were asked to estimate the level of effort involved in recruiting. We attempted analysis of level of involvement in recruiting, number of employers involved in the program, and years of operation, but found little evidence to support any differences among programs based on these variables.

In terms of the amount of full-time equivalent effort devoted to employer recruitments, the average is about .5 FTE per program. As Exhibit 15 indicates, the older programs--ones that began before 1991--tend to commit slightly less effort (averaging .39 FTE, not including Kalamazoo's outlier of 4 FTEs) to recruiting than do the younger programs (averaging .56 FTE).

One obvious explanation for the slight difference of level of recruiting effort between older and younger programs is that older programs and their coordinating entities have had more time to develop strong relationships and build credibility with employer participants than have programs that are newer. Interestingly, all of the surveyed programs that were begun after 1991--a pivotal year in federal funding of new kinds of work-based learning efforts--are youth apprenticeship programs. This work-based learning model tends to be highly structured and requires significant commitment from

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[10] It is worth remembering that programs surveyed for this study were screened to include only those that included a significant amount of work-based learning activity. This may have biased the survey results toward paid rather than unpaid work.

Exhibit 15

Program Variations in Number of Employer Participants and FTEs Involved in Recruiting

Program	Year Program Began	Number of Employer Participants	FTEs Involved in Recruiting[11]
Calhoun Area Technical Center (Battle Creek, MI)	1970-71	53	.3
Dauphin County Technical School (Harrisburg, PA)	1970-71	43	.1
Academy of Finance (New York City, NY)	1982-83	50	.3
Partnership Project (Portland, OR)	1984-85	30	.3
Education for Employment (Kalamazoo, MI)	1986-87	370	4.0
Baltimore Academy of Finance (Baltimore, MD)	1987-88	35	.2
Kent County Technical Center (Kent County, MI)	1989-90	2,070	.2
Career Partners, Inc. (Tulsa, OK)	1989-90	14	1
Oakland Health and Bioscience Academy (Oakland, CA)	1990-91	150	.8
Pasadena Graphic Arts Academy (Pasadena, CA)	1991-92	6	.5
Industrial Modernization Center (Lycoming County, PA)	1991-92	23	.2
York County Area Vo-Tech School (York County, PA)	1992-93	14	.3
Southern Maine Region Youth Apprenticeship Program (Cumberland County, ME)	1992-93	24	.4
Fox Cities Education for Employment Council (Appleton, WI)	1992-93	30	1.5
Pickens County Youth Apprenticeship Program (Easley, SC)	1992-93	80	.5

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[11] Coordinators were asked to estimate the number of full-time equivalents (FTEs) who are involved in recruiting. Most coordinators listed not only fractions of their own time but also fractions of time in which others were involved. Such individuals include instructors, employers, mentors, and school district personnel. The FTE number listed here represents the total estimated effort of these individuals.

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employers. The average recruiting FTE for this group was .56--which is higher than the total average; the average number of employers involved (30) for this group was lower than the average overall (1,035). Only time will tell if this group of youth apprenticeship programs will experience a more rapid increase in number of employers, compared to those programs that are more established.

Several program coordinators mentioned that more effort went toward employer recruitment during the initial phases of their program than once their programs became established and known in the community. "Now, employers call us," one program coordinator said. An established reputation also makes it easier to attract new employers, as illustrated in the two case study sites, Boston and Philadelphia (see box below).

Boston and Philadelphia:
Proven Track Records Enhance Recruitment Effort

In the case study sites of Boston and Philadelphia, efforts to involve employers in work-based learning rely, to varying degrees, on well-established coordinating entities, two of which are intermediary organizations--distinct from the school district--that link the public schools with the business community. In both cities, the long-standing relationships and credibility with employers that these entities have developed have proven critical to involving and maintaining employer participation. In Boston, the PIC--established in the late 1970s--serves as the intermediary. In Philadelphia, Academies, Inc.--established in 1988[12]--is the intermediary for the Academies program; the school district's Education for Employment Office--established in 1992--coordinates the Education For Employment program.

As Exhibit 16 illustrates, however, the number of FTEs involved in recruiting did not necessarily translate into a higher number of employers involved in programs. When we grouped the programs into thirds by the median number of employers involved, the average was essentially identical for all three groups.[13]

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[12] Although Academies, Inc. was formed in 1988, the oldest academy programs have been in existence in Philadelphia since 1969.

[13] Kalamazoo's program that has 4 FTEs devoted to recruiting employers is an extreme outlier in our sample. Although it has a large number of employers involved (370), we removed this program from the computation for large employers. If we had left it in, the average would have increased to 1.15 FTEs for programs with 53 or more employers involved.

Exhibit 16
FTEs Involved in Employer Recruitment by Employer Size

Measure	Employers with Small Number of Employers Involved (from 6 to 24)	Employers with a Medium Number of Employers Involved (from 25 to 50)	Employers with a Medium Number of Employers Involved (from 51 to 2,070)
Average FTEs Involved in Employer Recruitment	.47	.48	.47 (or 1.15, including Kalamazoo outlier of 4 FTEs)

Developing Effective Recruitment Strategies

Program coordinators use a variety of methods to advertise their programs and recruit employers to participate in work-based learning programs. However, as highlighted in Exhibit 17, employers respond to some methods more positively than they do to others. Nearly all surveyed employers (95 percent) indicated that a recommendation from someone in their industry or from an industry trade association is an influential factor in deciding to participate in work-based learning, and all programs used this method to recruit employers. Two methods considered as highly persuasive by employers--a recommendation from an employee inside the employer's organization and contacts with work-based learning graduates who are now employed--seem to be underutilized by the program coordinators interviewed for this study. Newspaper articles and advertisements, which a majority of programs used to recruit employers, were considered by employers to be less desirable than other recruitment methods. Employers were quick to point out, however, that none of these methods of recruitment in isolation would persuade them to participate.

Exhibit 17
Recruitment Methods

Ways Coordinators Advertise Their Programs and Recruit Employers to Participate	Number/Percent of Employers Indicating Factor as Influential (N=86)	Number/Percent of Programs That Use the Factor to Influence Employer Participation (N=15)
A telephone call	77%	100%
A letter of invitation and program summary from coordinating entity	85%	87%
Newspaper articles	31%	80%
Advertisements	24%	54%
Recommendation from someone in industry field or trade association	95%	100%
Recommendation from employee inside of employer's organization	93%	79%
Contacts with graduates who are now employed	83%	57%

The case study sites shed some light on why surveyed employers indicated that using participating employers or trade associations to recruit other employers was an extremely useful recruitment tool. (See box below detailing Boston and Philadelphia recruiting efforts.) Work-based learning programs in both Philadelphia and Boston emphasized this recruitment method. Employers in both sites indicated that this method was effective because they viewed other employers as being more familiar with the culture of the business world and, therefore, better able to understand how a decision to participate in work-based learning would affect their workplaces.

Boston and Philadelphia: Lessons in Recruiting Employers

In both Boston and Philadelphia, program staffs used a number of strategies to recruit employers to participate. Strategies found most effective emphasized a familiarity with the needs and concerns of the recruited employers and drew on sources that were credible to employers--such as other employers--in the recruiting process. The two most effective employer recruitment strategies used by these programs are described below:

- **Having employers recruit other employers.** Participating employers often contribute to the recruiting process. Projects in both cities engaged participating employers--beginning with those who serve on governing boards--in actively contacting other employers about participation. Said one Philadelphia health care employer who participates in work-based learning through an Academy, "Our CEO is the vice chairman of the Health Academy. The other [Academy] vice chairman is the CEO of a neighboring hospital. We have a close relationship; through that, we became involved [in work-based learning]." In Boston's ProTech, workplace supervisors also participated in recruitment by giving presentations to potential employer participants.
- **Using a recruiter with a business background.** In Boston, initial employer involvement begins with the ProTech industry coordinator, who is a retired executive of a large bank. He is responsible for recruiting employers to participate in the program. Employers commented that his familiarity with the business world made his arguments for participation in the program more credible. The industry coordinator "speaks my language," said one financial services employer.

Providing Operational Support to Employers

Program coordinators were asked whether or not their project supports employer participation in several ways. Substantial percentages of the coordinators suggested that their program employed the following supports to facilitate employer participation:

- Pre-screening student participants for reliability
- Pre-screening participants for technical knowledge
- Pre-screening participants for commitment to further work
- Providing a scheduling coordinator
- Troubleshooting and offering employers technical assistance

When asked a similar question, the largest percentage of surveyed employers--91 percent--rated "pre-screening student participants for reliability" as "very" or "critically" important functions of the work-based learning program. Only 25 percent rated "pre-screening participants for commitment to further work" as "very" or "critically" important. (See Exhibit 18 for details.)

Exhibit 18
Types of Program Supports That Coordinating Entities Can Provide

Program Support	Programs That Offer This Support	Percent of Employers Rating Support as "Very" or "Critically" Important
Pre-screen student participants for reliability	93%	91%
Pre-screen participants for technical knowledge	80%	46%
Pre-screen participants for commitment to further work	80%	25%
Provide a scheduling coordinator	80%	59%
Troubleshoot and offer employers technical assistance	93%	68%

The programs with the largest numbers of employers involved offer all of these supports; the programs with the fewest number of employers involved offer some of these supports. Furthermore, in programs with larger numbers of employers (from 12 to 50) who have discontinued their participation over the past three years, most tend to offer fewer of the supports identified here.

The fear of having to invest time in students who are not mature enough to sustain participation in a work-based learning program may be one reason why such a high percentage of employers surveyed viewed pre-screening students for reliability as important to participation in a work-based learning program. Boston's ProTech provides an example of such employer concerns (see box below).

Boston: A Lesson in Screening Student Participants

During ProTech's first year, teachers at the students' schools selected student participants. PIC staff and employers agreed that the teachers were most likely to know the students best because they worked with them the most. However, as the program got underway, the teachers--who misunderstood the target population of the program and the level of maturity the jobs required--selected students who were highly at-risk of dropping out of school. This selection process was described by both ProTech staff and employers as "a big mistake"--33 percent of these students dropped out of the program.

As a result of the first year experience, ProTech established attendance and grade requirements during the second year of the program. Students have to maintain a "C" average and 90 percent attendance record before they are placed in jobs. In addition, students participate in job shadowing rotations within each workplace, which allows employers to "size up" potential student participants. Also, at their request, employers were included in the interviewing process. Lead coordinators in each industry recruit student participants and arrange a screening process for students, which allows employers to interview students. Employers have become more engaged in the student selection process and the attrition rate has now dropped to 12 percent.

Employers, both those interviewed and those surveyed, value highly the role of program support in the form of troubleshooting and technical assistance. For example, coordinating entities help to bridge the gap between school culture and business culture. Because the hours that teachers are in school--7:00 am to 2:30 pm in some schools--can vary dramatically from the hours that some worksite supervisors are in the business workplace, some worksite supervisors expressed frustration at the difficulty they had in reaching teachers if they have an immediate concern about a student. To address this issue, ProTech lead coordinators are based at participating schools, but they do not teach, are available during longer hours, and are therefore more accessible to employers than are teachers. Employers involved in the program appreciate that they can easily contact lead coordinators about concerns they may have with a student; as neutral parties, the lead coordinators also are better situated to share these concerns with the appropriate school staff.

Technical assistance and troubleshooting are also important functions that an effective coordinating entity can provide. For example, in Philadelphia's EFE project, coordinators work with employers to identify and develop work-based learning opportunities, create training plans for students, train work-site mentors, and maintain contact with work-site coordinators and mentors. The program also employs school-site coordinators who are full-time teachers. These teachers also monitor relationships between students and employers, screening potential student participants by their grades and maturity level before they are allowed to interview with employers.

However, employers do not necessarily want coordinating entities to be overly intrusive. Employers in some programs said that they did not need or want program staff or teachers calling them on a regular basis. Instead, they prefer to contact the program if there is a problem.

V. Implications for Involving Employers in Work-based Learning

The survey of employers on which this report is based shows encouraging signs for continued and increased employer participation in work-based learning. Overall, incentives appear to influence employers more than disincentives often enough to keep most programs successfully in operation. In fact, most work-based learning programs have been able to increase the level of both student and employer involvement over the last three years, and expect this trend to continue next year. Furthermore, employers who have participated in work-based learning programs over several years have tended to gradually increase the number of students they take--and most plan to increase this number again for the 1995-96 school year.

The most compelling reasons for employer participation include:

- ***A desire to attract new employees.*** Incentives such as concerns about shortages in labor due to growth or changing technology, opportunity to train future employees, a need for higher skilled entry-level workers, and current labor shortage are the most pressing factors that encourage employers to participate in work-based learning;
- ***A desire to contribute to the improvement of education and the community.*** Factors such as becoming involved in school improvement, being concerned about the quality of education, and organizationally investing in the community are important incentives that encourage employers to participate;
- ***Program organization factors that ease employer participation.*** Such factors necessitate a strong coordinating entity to help ensure smooth program operation, provide technical assistance and training, and solve problems when they arise.

Overall, the number-one benefit that encourages employer participation is a desire to attract new employees to the organization. However, some other benefits are also very important. Interestingly, employers surveyed who were current participants of work-based learning programs were more motivated by factors concerning a desire to contribute to the improvement of education and the community than were former participants, which has implications for the expansion of employer involvement in work-based learning. Significant expansion may be reliant upon successfully persuading employers of their need to make a social investment through participation in work-based learning.

Overall, employers cited few disincentives as important in dissuading their organization from work-based learning participation. Those disincentives that proved to be the most important concerned employer-related factors, such as time and organizational changes. A close second, however, concerns programmatic issues, such as reliability of students, school system bureaucracy, and lack of technical assistance from the work-based learning program. While economic uncertainty ranked third in terms of being employers' number-one reason discouraging work-based learning participation, one-fourth of all employers--the largest such percentage--cited this factor as being very important. Issues of program flexibility and various employer-related factors become increasingly more important as an employer's level of participation in work-based learning decreases. Employers who do not participate in work-based learning programs are more concerned than those who do about issues of student reliability and uncertain economic climate. Former participants consider both organizational changes within the business and issues concerning the work-based learning programs, themselves, to be stronger disincentives than do the other groups. Non-participants are somewhat more concerned about the opposition of organized labor.

Of the factors that appear to influence employer participation in work-based learning programs the most, many are beyond the control of the programs, their coordinating entities, or their governing bodies. These include the general economic climate, organizational issues internal to the employers' organizations, and the extent to which an organization's leaders view community involvement as a business priority. However, there remain several factors that employers view as important and that programs can control to some extent. By focusing on these factors, work-based learning programs will be most successful at attracting, retaining, and increasing the level of participation of employers.

Program design and structure:

- Involve employers in program decision-making
- Link student participation in work-based learning with real rewards (e.g., wages, class credit, registered trade hours) as a way to increase their reliability
- Decide on the short-term goals of the program: if the priority is getting a maximum number of students to participate, the program should focus its recruiting on large-sized employers; if the goal is to build a broad base of support, the program should target businesses of all sizes
- Align occupational areas with areas of regional economic growth

Coordination:

- Develop an effective coordinating entity to administer the program
- Reduce bureaucratic barriers related to business involvement with school systems and work-based learning programs
- Minimize paperwork for employers
- Understand the needs of specific employers when matching students to jobs; involve employers in student selection
- Make it clear who employers can contact when they have questions or concerns and make it easy to reach that person

Outreach and employer recruiting:

- Approach different employers differently; employers in different industries and of different sizes often make decisions about participating in work-based learning programs based on factors specific to their enterprises.
- Promote program successes, in terms of student productivity on the job and their contributions to the organization and in terms of their post-program activities such as postsecondary attendance, further training in the field, or employment outcomes
- Appeal to employers' sense of commitment to the community, and demonstrate how participation is a way to make tangible improvements
- Use successful graduates as program advocates
- Seek program endorsements from trade and other relevant associations and community groups
- Publicize employer involvement both to draw attention to employer's contribution to the community and to attract interest of other employers

The factors that influence whether or not an employer will choose to become involved in a work-based learning program vary from site to site and employer to employer. Individual programs must work to identify and understand the specific factors important to the employers they wish to recruit and retain. By being aware of variations across sites and employers, program coordinators are more apt to be able to provide meaningful work-based learning opportunities to the students who participate in their programs.

Appendix A

Profiles of Boston and Philadelphia

BOSTON, MASSACHUSETTS

Context for Work-based Learning Program

ProTech, created by the Boston Private Industry Council (Boston PIC), is the most structured work-based learning model offered by the PIC, which has served as the primary broker between schools and employers since the late 1970s when it first began placing students in summer and part-time jobs with Boston employers. Following a youth apprenticeship model, ProTech combines school- and work-based learning experiences to prepare students for occupations in health care, financial services, and utilities and communications. Initially funded by two Youth Apprenticeship Demonstration Site grants from the U.S. Department of Labor in 1990 and 1992, ProTech was awarded a Federal Local Partnership Grant in the summer of 1994.

Program Structure

Student participants are recruited into ProTech during the spring of their sophomore year. During the fall of junior year, students are clustered in core academic subjects related to the industry in which they will be working. Typically, students have their homeroom and two academic subject courses together. Students take an "Introduction to Industry" course during this semester. As part of this course, students participate in a series of 12 to 15 job rotations: one afternoon per week for three hours, students shadow employees at each company to learn about the different functions of the company, the career paths available in each function, and the skills required of these careers.

During the second semester of their junior year, students who maintain a 90 percent attendance record and a "C" average are placed in jobs. After interviews with potential employers, teachers, and PIC staff, students are matched with an employer. The ProTech terms of participation are laid out in a "Letter of Agreement" that is signed by the student, his or her parent, the headmaster of the student's school, the employer, and a representative of the Boston PIC. Students work 12 to 15 hours a week after school. Also, students get a training plan designed by the student's workplace supervisor assigning levels of performance to the job's respective skills. According to this plan, students go through performance reviews twice a year.

During the summer, students work full-time for eight weeks. In their senior year they continue to work 12 to 15 hours per week after school while remaining in clustered academic classes. After graduating, students can continue to work part-time for their employer if they choose to pursue postsecondary education.

The program began placing students with health care employers in 1991; today it also places students in financial services, utilities, and communications. More than 375 students from five Boston public high schools are participating in ProTech during the 1994-95 school year.

Each industry program has a full-time lead coordinator employed by the PIC who serves as a liaison between employers and participating schools. These coordinators--who are based at ProTech high schools--also counsel students throughout the program, including helping them to apply to postsecondary institutions. They also are involved in employer recruiting.

Student participants. During the first year of the health care program, students were selected by their teachers and placed in the workplace right away. According to a PIC staff member, this selection process was used because employers thought that teachers, who work with the students on a regular basis in school, would identify the best student candidates for their workplaces. PIC staff and employers described this selection and placement process as "a big mistake" because students had no basis for choosing the job they wanted, and because the employers did not get a chance to screen the students before they started. Some teachers understood the new program "as a salvation for kids who had nowhere else to go," said one PIC staff member, "in fact, it demanded ten times the maturity of a regular student....Employers were asking,'Who sent this kid?'" As a result, 33 percent of the first-year students dropped from the program.

During the second year of the program, to address this problem, students rotated in each workplace to allow them to sample different jobs in the hospital. This job rotation also allowed the supervisors to "size up" the prospective students. Employers also interviewed students who applied for positions in their industry. One worksite coordinator described an informal competition between participating companies to recruit certain students because of the positive impressions these students made in their interviews with employers. As a result, attrition rates for the year three and year four cohorts dropped to 22 percent and 12 percent respectively.

In 1992-93 the Boston Public Schools had an enrollment of 62,407. Eighty percent of these students were minorities, 20 percent were white. Student participation in ProTech reflected this diversity of the students currently participating in ProTech 56 percent are African-American, 27 percent Latino, 8 percent white, 8 percent Asian, and 1 percent from other backgrounds. According to employers and PIC staff, most participants were "B" or "C" students. Some students were described as being at risk of dropping out when they entered ProTech.

Students' interest in the program varies by school. For example, at one participating high school where it is considered prestigious to participate in the health care program, there is a two-to-one ratio of student applicants to slots, but at another high school, there is no competition for health care slots.

Program Governance

Board of the Boston PIC oversees the Federal Local Partnership Grant the PIC received and oversees ProTech. Each ProTech industry program is governed by an executive committee made up of business and industry executives and the headmaster at each participating high school. This group meets on a quarterly basis; it determines program policy (e.g., the terms for the letter of agreement, students wages) and oversees program performance. Another employer group, made up of worksite coordinators at each company, meets monthly with the lead coordinator for their industry to discuss daily operational issues. Employers, particularly those who were involved during the first two years of ProTech, valued these meetings as a chance to share student success stories as well their concerns about students. They also valued the input they had in the way the program was structured.

Employer Recruitment

The PIC is the primary recruiter of employers at all levels of workforce development--including work-based learning programs--in the Boston area. It has a history of involving employers in work-based learning since the late 1970s. Employer recruitment for ProTech takes place at several levels: ProTech staff, board members, and participating businesses all have recruited employers. Technically, employer recruitment across all industries is the primary responsibility of the program's one industry coordinator who works on a volunteer basis two to three days a week. The current industry coordinator has worked in this capacity for ProTech since its inception. He retired in 1989 from the Bank of Boston after a long career in a variety of departments. However, he had never worked in human resources or participated in education organizations. PIC staff and participating employers said that the industry coordinator's background in business gives him credibility when he approaches potential employers. A senior vice president at one financial services company noted that "[the industry coordinator] spoke my language."

Although the industry coordinator has primary responsibility for recruiting employers, he is assisted in this task by PIC staff--including the lead coordinators for each industry--PIC board members, and employers participating in the program who may introduce a potential employer participant to ProTech through an introductory meeting, phone call, or letter. The industry coordinator usually follows-up on this introduction and arranges a meeting with interested employers to explain the program in more detail.

Industry Selection

Boston has organized its 15,000 employers into 10 industry clusters. ProTech uses two criteria to identify industries in which to establish programs: (1) the number of employees in the industry and (2) its accessibility to public transportation. The program selects not only industries employing 10,000 people or more in the Boston area but also industries whose employers are accessible by public transportation to student participants.

Employer commitment. Before they place students in jobs, ProTech employers must commit to one year of program planning and design. This includes attending regular planning meetings, participating in student selection, and reviewing curriculum. Employers also arrange for classroom teachers to visit the workplace. These "teacher audits" allow teachers to observe the workplace and design a curriculum that addresses the skills students will need to capably work at a worksite. Employers also provide externships that provide teachers with summer work experiences.

During their second year in the program as students enter the workplace, employers continue to attend executive committee and working group meetings, arrange teacher audits, and select student participants. They also organize and execute job rotations for students and develop job placements for students. A worksite supervisor at each worksite oversees the students' work. At each participating employer worksite, a coordinator serves as the employer's contact with the PIC staff and coordinates worksite supervisors.

By signing a letter of agreement with students employers promise to:

- provide a lead person or worksite coordinator to support students
- provide unpaid worksite rotations
- provide paid jobs to students meeting grade and attendance criteria, a minimum of 10 hours per week
- provide full-time summer jobs
- provide students with guidance in the career decisionmaking process throughout the program

- provide the optimum tuition assistance available for students who pursue ProTech-targeted occupations

Recruitment Strategies

ProTech's strategies for employer recruitment vary according to industry and to an employer's past relationship with the PIC. ProTech began by focusing on the health care industry, where the PIC had some of its strongest ties with employers, most of which were large hospitals. The president of New England Medical Center, who served as the PIC's chair when ProTech's health care program was being established, took an active role in recruiting, contacting CEOs at other hospitals that had worked with the PIC. Through his efforts, four CEOs not only committed their hospitals to participate in ProTech but also instructed their senior human resources executives to implement the program. The industry coordinator then arranged follow-up meetings with these executives to elaborate on ProTech. Of these five original employers, all had previously been involved with PIC programs for Boston public high school students before participating in ProTech.

Because of his success in recruiting hospitals to participate, the industry coordinator next focused his recruiting efforts on human resource executives in the finance industry. Like health care, the finance industry also had several large employers who played an active role on the PIC board. However, this approach was less successful, particularly with insurance companies and investment management firms. Returning to his original approach of working through CEOs, the industry coordinator convinced the PIC chairman to write a letter to the CEOs of financial services employers that had relationships with the PIC. These letters were followed up by phone calls and presentations by the industry coordinator. Out of 12 financial services employers recruited, eight ultimately participated.

Industry structure. The industry coordinator stressed the importance of examining the structure of an industry when recruiting employers and then tailoring the recruitment approach accordingly. If an industry is a "tight club" consisting of a few large employers, then a program needs to identify an influential CEO and use that person to recruit other employers in that industry. Having the CEO of the New England Medical Center recruit other hospital CEOs was how the PIC used this approach to build its health care program. Rather than recruiting employers individually, in order to recruit companies for a utilities and communications program, the PIC chair held a breakfast with the CEOs of the five major utilities and communications employers in Boston (all of whom knew each other) to introduce them to ProTech. All of these employers had worked with the PIC previously and knew the PIC chair. Three out of five of these employers agreed to participate.

The program is using a different strategy to recruit employers to participate in its environmental services program scheduled to begin student placements during the 1995-96 school year. Only half of these employers have any connection with the Boston PIC; some of them are based outside the city, although they are accessible by public transportation. In addition, the size of these companies ranges from under 35 employees to more than 600 employees.

Because the environmental services industry included many small employers who did not work with the PIC, ProTech approached the Boston Chamber of Commerce to inform these employers about ProTech. The chair of the Chamber of Commerce Education Committee convened three forums with environmental services employers to showcase various models--presented by PIC staff--for employer involvement in work-based learning, including ProTech and the Academy model with which the PIC also works. The employers preferred the ProTech model. The Chamber then sent all environmental services employers in the area an outline of the ProTech plan. Using a list of these employers provided by the Chamber, the industry coordinator contacted them and invited employers to a meeting specifically on ProTech. According to the industry coordinator, the meeting was only marginally attended because most employers were still unfamiliar with ProTech. The executive director of the PIC sent out a letter to these same 44 employers which was followed up with calls and, if the employer was receptive, meetings with the industry coordinator. Of these employers, 15 have agreed to become ProTech participants taking 26 students; 12 who initially did not want to participate asked to be contacted again in six months. According to the industry coordinator, developing the environmental services program has taken longer because these employers can take only one student rather than the 10 to 20 taken at one time by the larger health care and financial services employers.

ProTech also plans to develop a program in business services, again working with the Chamber of Commerce. The PIC sent out a similar letter to business services employers, stressing that each program is "industry-designed and driven."

Employer Size

Employer size is a major consideration in recruiting employers. In general, it has been easier for ProTech to recruit large employers because the resources needed to participate in the program are relatively small compared with the other costs incurred by these employers. Employers participating in the health care, financial services, and utilities and communications programs are all large corporations with several hundred--and in many cases thousand--employees. These corporations did not view participating in ProTech as a major commitment of other resources; in fact, some employers were unable to estimate what the costs of participating were because they did not track them.

As noted above, ProTech is successfully recruiting small and mid-size environmental services employers. However, there is some indication that for employers smaller than those involved in ProTech's health care and financial services programs, committing resources to a work-based learning program like ProTech has a greater and more noticeable cost. For example, one electronics instrumentation manufacturer with 400 employees in the Boston area who was not approached by ProTech said that the company could not afford to have an engineer supervise or mentor a high school student. This trait was corroborated by a larger electronics assembly firm (800 employees) where, because of downsizing, the company had few supervisors who could oversee the work of high school students.

The industry coordinator focussed on a few common themes when recruiting employers, regardless of industry. He emphasized to employers that ProTech was not "a social obligation program" but rather "long-term, strategic employee development." For example, one handout used to recruit environmental services coordinators begins by asking, "Where will we get competent technicians, administrators, and customer service personnel in the nineties?" Detailing how entry-level job positions like these require more than a high school diploma, the handout then describes the ProTech model. For employers who have been involved in the PIC summer jobs program, the industry coordinator stresses that ProTech is a better way to use that money; they can work with the same student for two years with the option of hiring the student rather than training a student to work for only a summer. "I am selling self-interest when I am out there," the industry coordinator said.

The industry coordinator also emphasizes the program governance structure that enables employers to determine how an industry program will be structured. ProTech employer recruitment literature explains that "because these [ProTech work-based learning] programs are each run by an Executive Committee made up of participating employers from the industry and the participating Boston high school headmaster(s), the employers can have quality control over the program."

To participate in the planning and implementation stage of the program, potential employers are given an "employer involvement sheet" that outlines the employers baseline commitment in staff time. The sheet outlines estimates of the staff time needed for meetings, student selection, teacher audits of the worksites, and other components. He said that employers appreciated this breakdown because it described concrete levels of involvement. The industry coordinator estimated that an employer's participation in ProTech takes 65 staff hours per year. However, this figure does not include workplace supervision, an aspect that worksite supervisors noted is a significant time commitment when a student is first placed.

ProTech was also presented to employers, particularly banks, as a new source for racial and ethnic diversity in their work forces. According to the industry coordinator, banks must comply with Federal Reserve regulations about diversity in their workforces.

Participating employers also introduce ProTech to other employers in their industry. Human resources professionals and student workplace supervisors may accompany a ProTech representative to talk to a potential employer participant. Employers also bring up ProTech when interacting with other employers. For example, the human resources coordinator at one participating financial services firm was asked by ProTech staff to mention the program during a meeting she was having with another employer who was involved with a separate "diversity program".

Recruiting does not stop once an employer agrees to participate in ProTech. Most worksite coordinators have to recruit departments to take on a student within their organization. All worksite coordinators interviewed worked in human resources. To create placements, ProTech lead coordinators in each industry participate with the worksite coordinator in presenting ProTech to department heads within a business. In most participating companies, the human resources department paid all or part of the student's wages during a student's first two years in the program--rather than the department in which the student worked--as an incentive for department heads to hire a student.

Motivations for Employer Involvement

A variety of factors influenced the decisions of employers to participate in ProTech. Reasons for participating varied by industry.

Commitment to the PIC

All of the ProTech employers interviewed, and a majority of the business participants in the first three established ProTech programs (health care, financial services, and utilities and communications) had previous connections with the PIC. Many of these had hired students as part of the PIC's summer job program. Some had CEOs who had served on the PIC's board of directors or who had been involved with the PIC while working for another employer. Worksite coordinators said that within their companies, departments whose experiences working with high school students through the PIC had been positive expressed interest in working with ProTech students.

Because of their past relationship and established partnership with the PIC, these employers were willing to risk participating in ProTech, even though it was a new program. Several health care employers said that the student selection process during the first year was a major program weakness. However, none of these employers dropped out. According to the PIC executive director, this was because the CEOs of the first employer participants (or their friends) served on the PIC board and thus no CEO wanted to back out of his or her commitment.

Commitment to Young People and to the Community

A number of workplace supervisors and employer coordinators of ProTech students expressed their concern for young people in Boston as a major reason why they had committed their time to participating in ProTech. For example, at one hospital, the human resources vice president said that she was "deeply concerned with the lack of personal ambition in the kids' lives....We owe the next generation something." This respondent noted that despite the hospital administration's initial hesitation to participate, her commitment to working with young people tipped the balance.

At one financial services employer the worksite coordinator said that when she was trying to identify five first-year placements, she "tried to tap into personal commitment" in order to persuade a department to hire a student. To find slots for additional students, she now has to emphasize the practical and financial reasons for a department to hire a student.

Training Future Employees

Almost all ProTech employers in our study viewed their participation in ProTech as a way to train future employees. They envisioned students graduating from high school, continuing for two more years in postsecondary school, and returning to work at their original employer. For example, one financial services company that has more than 7,000 employees in the Boston area alone said that the company had more than 1,000 openings that they were trying to fill. "We see ProTech students as our employees of the future," she said. Most ProTech employers said they would hire a student who had worked in their industry at another ProTech employer because they knew the quality of the students. However, most employers said that they would continue to participate in ProTech even if a student did not return to work at their company--although their reasons for doing so differed.

A ProTech staff member noted that health care employers were more interested in having students come back to work for them than were other industries. According to a human resources staff person at one hospital, her CEO became involved in ProTech when he heard "alarming statistics" indicating that less than 1 percent of the graduates of the Boston Public School System were entering careers in health care--despite health care making up more than 8 percent of the employment opportunities in the Boston area. The ProTech lead coordinator for health care said that hospitals were concerned about the small pool of qualified applicants for entry-level positions; this paucity was a major incentive for hospitals to provide paid positions for students through ProTech.

This potential for employers to hire long-term employees distinguishes ProTech from the summer jobs program the PIC coordinates. Students in summer jobs are not typically viewed as potential employees; once they graduate they are rarely hired full-time by the same company that hired them as summer workers.

Means for Filling Immediate and Chronic Staffing Needs

Besides training future employees, some employer participants also view ProTech students as a way to meet immediate employment needs. Because of restructuring and layoffs, some employers are unable to keep part-time staff for entry-level positions. For example, at one hospital, one ProTech student worked in the hospital day care center in a position with a high turnover rate among part-time staff. Employers said that some ProTech positions would otherwise have to be filled by temporary employees; most employers were pleased to have a student work in a hard-to-fill position for two years or longer.

Desire for Diversity in the Workforce

Three ProTech employers indicated that the need to increase racial and ethnic diversity in their workforces was a major incentive for participating in ProTech. ProTech students reflect the racial demographics of the students in the Boston Public Schools, 80 percent of whom are minorities. Some employers felt they needed Spanish-speaking employees to sell their products. In the case of one financial services employer, the company wanted to increase the number of Hispanic employees on its retail side because of its growing Hispanic client base. The company's institutional clients wanted to know whether the company's staff demographics were similar to those of the client institution. The company does not officially have an affirmative action program; however, departments try to reflect the changing demographics of the Boston community as suggested in Workforce 2000.

Besides being driven by demographics of their client base, employers also mentioned federal and state regulations and guidelines that became incentives for them to participate in ProTech. One financial services employer commented that the Massachusetts Commission Against Discrimination "could make life unpleasant" for her company if it were to perceive a lack of racial diversity in her workplace. The industry coordinator said that Federal Reserve regulations on workplace diversity for banks is an incentive for banks to become involved in ProTech.

Peer Pressure

Employers in both finance and health care indicated that the participation by other peer institutions in ProTech influenced their decisions to participate. The industry coordinator said that he has noticed not only peer pressure but also a desire to keep up with those competitors seen as industry as he recruited health care, financial services, and environmental services employers. As an example, he noted that when larger environmental services employers heard that one of the largest employers in the industry had agreed to participate, they also decided to participate. He also anticipated that the involvement of a large mutual fund employer, seen as an industry leader, will influence other initially hesitant financial services employers to now participate in ProTech. "This [participation in ProTech] is a lemming game," said one ProTech staff member.

In some cases, this peer pressure comes from high-level executives at participating businesses who advocate for ProTech. For example, the senior vice president of human resources at one hospital asked the CEO and senior vice president of human resources at a hospital participating in ProTech to contact her CEO and lobby her to participate in the program.

The industry coordinator also commented that peer pressure among human resources professionals in health care is "huge" because many are members of the American Society for Hospital Human Resource Administrators. He described one ProTech hospital as having been "teased" into participating in ProTech by the other human resources professionals at ProTech hospitals.

Opportunity to Influence a School or School System

Two ProTech employers said that they valued the opportunity to influence the way students were taught in school. Said one health care worksite coordinator about his hospital's participation in ProTech, "We can inject our reality into math and science [instruction]. It's a roundabout way to do education reform." A human resources executive at a participating bank said, "Work study students are nice, but they are not driven to a skill set like ProTech students." A senior management information systems officer from this bank met with students' computer class teachers to develop workplace-related exercises the teachers could use in the classroom. The employer coordinator believed that one of the biggest, unspoken incentives among employers is "the perception that a high school diploma is useless and that maybe ProTech is a way of solving this."

Many employers emphasized the importance of ProTech being an employer-driven program. Besides participating in the governance of the program through the executive committee, employers are also involved in selecting the school partners. Schools must go through a request for proposal process to work with ProTech. The school applications were reviewed by participating employers. Employers exhibited a sense of ownership of ProTech because of their involvement in the program's design.

Role of the PIC Staff as Intermediaries with Schools

Several ProTech employers noted that the participation of ProTech staff in the day-to-day operation of the program was a critical feature of the ProTech model. "Without [the ProTech lead coordinator], the students are a drain," said one worksite coordinator. "We don't have the experience [working with youth]. What do we know about teenagers?" Employers said that having easy access to ProTech staff as a liaison to the schools was also important because teachers were difficult to reach because of their schedules. She noted that she lacked the time to track down teachers if she had a problem with a student.

In general, employers felt that the Boston Public Schools provided students with an education that fails to prepare them for the workplace. From their perspective, the schools resist change and their culture is very different from that of business. Because of these views, they appreciated having the PIC as an intermediary. Employers expressed confidence in the ProTech staff because of their history of working with the schools through the PIC. "I don't speak school language," said one employer pointing out the usefulness of the PIC staff.

Employers mentioned other incentives for participating in ProTech, including the opportunity to prescreen potential employees, labor shortages in specific areas within their company, and the need to hire more individuals from the community.

Disincentives to Participation

The disincentives most frequently mentioned by employers and ProTech staff were recent layoffs, uncertainty about employment needs because of the economic climate, and changes within the corporation because of restructuring.

Economic Uncertainty and Restructuring of Industry

Some ProTech employers were concerned about hiring students to work part-time while their businesses were laying off regular employees. For example, a human resources executive at one ProTech hospital who was supportive of the program noted that although the costs saved by not participating in ProTech were small for her large employer, the primary objection to hiring students would come from other employees who have seen their co-workers laid off. Because of recent layoffs, this employer is not taking on new students in the 1995-96 school year. Another employer in financial services who recently laid off 600 employees is reducing the number of new students it will bring on. According to the industry coordinator, three of the four financial services firms that chose not to participate in ProTech did so because they had recently laid off employees or were in the midst of merging with another company. A human resources manager at another hospital said that downsizing had also limited the number of summer job opportunities the hospital offered through the PIC. The layoffs also led to lower turnover of employees in the hospital, resulting in fewer entry-level positions for student trainees.

Two Boston-area electronics firms said that because of changes in technology and downsizing in the industry, their hiring needs for their businesses over the next few years are difficult to project. This makes them hesitant to have students trained specifically for their industry. The CEO of one firm was philosophically opposed to the schools preparing students for positions that "are not written in stone." He preferred that students receive a broad-based education that not only exposes them to music and art but also teaches them to read, write, and understand math. He said that his company prefers to hire and train entry-level employees.

Although layoffs and downsizing were mentioned as disincentives to participation, no ProTech employer dropped out of the program because of layoffs--although many had participated in mergers and/or laid off employers in recent years. Most employers noted that restructuring is becoming a part of their industry. Regardless of restructuring, some participating employers viewed ProTech as critical to their labor needs. "I can downsize by 25 percent but I still need to have kids that think well." This respondent noted that his future employees will need higher skill levels to support a team of doctors using a new magnetic resonance imager.

Corporate Culture

Training and career development were not a part of the culture of every ProTech employer. This made developing a program to train students time-consuming for some worksite supervisors. For example, a worksite supervisor at one financial services company described the experience of entering the company's workplace as "baptism by fire" because the workplace is very competitive and employees must develop their skills on their own. One nonparticipating electronics employer said that his employees worked in independent teams and received little supervision.

Additional Time Commitment

Employer respondents at all levels expressed concern about how the additional time commitment required to supervise students would weigh against their other priorities. For example, one financial services worksite supervisor noted that while the human resources staff who served as worksite coordinators for ProTech acknowledged her efforts as a worksite supervisor, her department head did not. "My boss doesn't pat me on the back," she said, adding that her work with ProTech did not come up in her performance review. As a result, this supervisor delegated more of the ProTech student supervision to other staff people within her department once the student began to learn the workplace. Other worksite supervisors also mentioned doing likewise. The ProTech financial services coordinator says that she is trying to persuade employers to award bonuses for those employees who supervise ProTech students.

At a ProTech hospital where layoffs had taken place, the human resources administrator said that department managers were being asked "to do more with less"; she was concerned that asking the managers to participate in ProTech would be an additional burden. "How can I ask them to do one more thing?" she said. This seeming imposition was also a concern of two midsize non-ProTech electronics assembly firms, both of whom noted that their supervisors were spread thin because of restructuring. A human resources director at one of these firms, who had participated in a high school co-op program eight years ago, described work-based learning with high school students as a "high maintenance, low-return proposition" that his firm could not afford.

While ProTech employers said that their participation in work-based learning is a significant time commitment, particularly during the initial start-up and training phase, they did not view this commitment as prohibitive to participation. However, two mid-size electronics manufacturers that were not participating in work-based learning said that because of their size and the importance of establishing worksite supervisors for students, it was not feasible for them to hire high school students. One human resources director said his decision not to participate in work-based learning was based on his perception that it takes twice as long to train two students working part-time as it does to hire one full-time employee. "If you train two kids and you lose one, then you are left with half a worker for twice the training time," he said. This concern about time and resources was echoed by a representative of the Boston Chamber of Commerce who emphasized that in small businesses, employees have clear job responsibilities that do not allow them time to supervise students. He noted that larger corporations are better structured for supervising students because they have human resource departments that can assist with student supervision.

As the number of students in the workplace increases, some employers expressed concern about the time commitment required to place and supervise these students. One human resources executive at a large bank said, "At some point you hit a critical mass. Managing 40 kids is different from managing 16."

Participation in Another Youth-related Program

Some employers declined to participate in ProTech because they were participating in another youth-related program. Because two employers approached by the industry coordinator were involved in "other diversity programs," such as Inroads, a summer employment program for minority college students, they chose to limit their participation to one program. Other employers had previous commitments to schools through other programs, including the Academy programs that are also coordinated by the PIC.

Role of Coordinating Entities

Although there are other small work-based learning programs in the Boston area, such as the Cambridge Rindge School for Technical Arts that has a work-based learning partnership with Polaroid, and the Communities and Schools for Career Success program sponsored by the Bay State Skills Corporation, the Boston PIC has been the dominant entity coordinating interactions and building partnerships between businesses and education since the late 1970s. In 1979, the PIC was created by the then-mayor of Boston and the President of the State Street Bank through a federal mandate designed to involve the business community in the design and governance of government-funded job training programs. Since its inception, the PIC has focused on poverty, education, and joblessness. The mission of the PIC is "to promote, stimulate, develop, and advance the social welfare of the City of Boston and its environs, and to foster increased opportunities for employment for its citizens."

In 1981, the PIC first began its relationship with the Boston Public Schools through its Job Collaborative program. The Job Collaborative program links students' educational achievement and good attendance with employment opportunities. A network of PIC staff known as Career Specialists work in 14 of Boston's 16 high schools and provide students with a variety of services including career awareness workshops and job training seminars; counseling, resume, and interview preparation; college and financial aid application assistance; job placement services during the school year and temporary summer positions (through the PIC summer jobs program); permanent placements for graduates who do not pursue higher education; and part-time jobs for Boston Public School graduates attending college locally. To participate in the Collaborative program, students must keep up their passing grades and good attendance. More than 75 percent of the students in the program are racial or ethnic minorities. The number of students served by the program increases every year, as has the number of companies participating.

Since 1980, the PIC has managed a summer jobs program for Boston high school students. Many large employers who serve on the PIC board have hired several students from this program. For example, in 1991, nine companies hired more than 30 students each as part of the summer jobs program, and three companies hired more than 100 each. Eight of these employers also participated in ProTech. In 1991, 2,331 students were placed in jobs with 523 employers and in 1994, 3208 students were placed in summer jobs. Students earned an average hourly wage of $5.96. In 1995 the goal for the summer program is to place 3,200 students in jobs.

The PIC also helps to build partnerships between individual schools and employers. This school-business partnership program started in 1975 with the work of the Trilateral Council, which went on to merge with the PIC in 1984. Originally focusing on high schools, the program now serves about half the middle schools in Boston as well. Business partners get involved with the schools that they are matched in a variety of ways, including having employees mentor and tutor students, offering workshops on career opportunities, and sponsoring events to recognize excellence in teaching and student performance. More than 25 businesses serve as partners to the Boston Public Schools; of the 21 employers who have taken ProTech placements, at least nine had participated in school-business partnerships before ProTech. The PIC also coordinates employer involvement in the National Academy programs with three Boston high schools in travel and tourism, public service, and finance.

Most ProTech employers who have been involved in these PIC programs regarded ProTech as a more intensive, work-based learning model which unlike the Jobs Collaborative or the summer jobs program, focused on the connection between what students were taught in school and how it relates to the workplace.

Underlying the PIC's efforts to build a partnership with the Boston Public Schools and employers is the Boston Compact which was brokered by the PIC. In 1982, business leaders concerned about the decline of public schools and the threat of a poorly prepared workforce worked with the Boston Public Schools, local institutions of higher education, and the Boston building and trade unions to create and sign a Compact. Through the Compact, each participant group committed to goals addressing these concerns. The Boston School Department agreed to:

- Improve daily attendance by 5 percent each year
- Reduce the high school dropout rate by 5 percent each year
- Improve academic performance of graduates so that they are at least competent in mathematics and reading
- Improve college placement rates by 5 percent each year
- Improve job placement rates by 5 percent each year

Boston businesses agreed to provide priority hiring to Boston Public School students and graduates; local institutions of higher education agreed to provide greater access and scholarships to Boston public school graduates; and Boston building and trade unions agreed to actively recruit Boston public school graduates into apprenticeship programs.

The Compact was renegotiated in 1989 and again in 1994. Currently, one of its five main goals is to increase students' access to employment and higher education. Central to this goal is the establishment of a school-to-career system in Boston. The PIC executive director believes that although the school district is in the middle of selecting a new superintendent, there will be no standstill in the district's effort to develop a school-to-career system because of the Compact.

PIC Structure

Unlike some PICs, the Boston PIC is incorporated as a nonprofit agency. It sponsors programs of its own--such as ProTech--independent of JTPA funds. Only five members of the PIC staff are involved in administering its JTPA grant. The rest of the staff, including 14 "career specialists," are considered "business brokers." The Boston PIC limits its Board membership to CEOs of businesses and to leaders of community-based organizations who have decisionmaking power at their own institutions. PIC board members are CEOs of many of the largest employers in Boston. Board membership rotates on a regular basis. The PIC Executive Director compared this structure to the United Way Board, saying that it encourages CEOs to get their corporation to contribute to PIC projects because they know they will sit on the PIC Board in succeeding years.

Outcomes

Increased Employer Involvement

The number of employers participating in ProTech has increased through the addition of employers within an industry as well as through the ProTech's expansion into new industries. When ProTech started in 1991, five health care employers participated; in 1994-95, that number had grown to ten. Financial services began with seven employers in 1993; it now has eight in 1995. In addition, three utilities and communications employers took students on for the first time in 1994, bringing the total number of industry sectors involved to three. Fifteen environmental services employers will be participating in that industry's program starting in September 1995, bringing the total number of employer participants in ProTech to 36 and industry sectors to four.

Generally speaking, ProTech employers viewed the students as making a contribution to their workplaces and believed that the students were aware of the investment being made in them. "They know that if they do not show up, they will be missed," said one supervisor. Most employers said that the students were treated the same as other employees. Employers noted that their employees were initially skeptical about how much the students would contribute in the workplace as well as the effort needed to train students. One workplace supervisor described his coworkers' reaction to the new ProTech student as, "Oh God, another student!" A number of employers said their employees expressed surprise at how productive and useful the students were to their departments. One financial services supervises said that now some ProTech students are "contributing more than some regular employees."

Some employers expressed surprise at the level of commitment students had to their job, describing them as "ambitious" and "taking the initiative." For example, one financial services supervisor said that three of the five students she supervised asked if they could work additional hours to develop their office computer skills on a weekday they had off from school.

Increased Student Involvement

Student involvement in ProTech has grown steadily over the program's development. Student involvement in ProTech's health care program has grown from 75 students in 1991-92, to 108 students in 1992-93, to 176 students in 1994-95. [1] The utilities and communications program will grow from 20 students in 1994-95 to 44 students in 1995-96. In 1994-95, the total number of ProTech student participants in the three industry sectors (health care, financial services, and utilities and communications) was over 375.

Eighty ProTech students who graduated from high school are pursuing postsecondary education. Of the first cohort of ProTech students, all graduated and were accepted by a postsecondary institution, 63 percent chose to pursue some type of postsecondary education; 79 percent of the second cohort are pursuing postsecondary education. Most of the first cohort (86 percent) will be the first generation in their family to finish a postsecondary experience. According to ProTech staff, once the students enter postsecondary school their progress is harder to track. The program employs two college counselors who offer support to students as they attend postsecondary institutions. But their efforts are more diluted than those of the high school coordinators because students attend more than 20 colleges in the Boston area. Students terminating their college experience are not counted as ProTech students unless they become full-time employees of participating companies.

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[1] Includes ProTech students who have continued to postsecondary education.

Unanticipated Benefits

Improved perceptions of urban students. One unanticipated benefit of employers' participation in ProTech was the two-way learning that went on between the supervisors and the ProTech students. "The supervisors are mostly white and from the suburbs. They are working with black and Latino students [through ProTech]. It has built an awareness of the students' 'personhood.' There has been a shift in the way they talk about Boston teenagers," said one supervisor. Some worksite supervisors became personally involved with the students. For example, one supervisor invited all the students in her workplace to her house for a barbecue. Several employers referred to the satisfaction they derived watching the students mature and become more confident in their jobs as they continued to participate in ProTech.

Changes in training of new employees. Some employers either did not have a corporate culture of training new employees or had not recently reviewed the way they trained. These employers noted that hiring ProTech students forced them to consider this issue. For example, one financial services employer reexamined how it trained its other incoming employees after participating in ProTech. As a result, the bank broadened its new employee orientation so that it introduced new employees to all aspects of the company.

Plans for Future Expansion of Work-based Learning

The Boston Public Schools have committed to developing a school-to-career system that will require a considerable increase in the number of participating employers. According to one ProTech coordinator, school-to-career was put on the Schools Committee's agenda by the vice president of the Federal Reserve Bank, Bill Spring, who is involved with the work of the PIC, and is a strong work-based learning advocate. As one step toward developing this system, the Boston Public Schools Committee voted to provide funding for school-to-career school coordinators in four Boston pilot high schools--with plans to eventually place coordinators at all high schools. The school-to-career coordinators are responsible for the development of the school-to-career leadership teams in each school and facilitate the curriculum career pathway development in their schools.

According to ProTech staff, the key to expanding employer participation is to institutionalize the broker function that Career Specialists employed by the PIC provide. An employer recruitment document designed by the PIC for the Boston Public schools states that "Over the years, a basic understanding has evolved between the employers and the [Boston Public]schools. Employers will provide paid work experience as long as someone prepares each student to accept the expectations of the workplace and remains available to solve problems should they arise on the job." Career Specialists have played this problem-solving role for the PIC's summer job and Jobs Collaborative programs; lead coordinators have played this role for ProTech.

To increase the number of employers involved in work-based learning, this document says "outreach to employers will be organized by industry clusters comprised of human resource directors and other gatekeepers who can deliver paid work experiences and set the conditions for ongoing involvement. These committees will be responsible for overseeing work-based learning strategies and skill standards." Boston has identified ten industry clusters, seven of which are already in various stages of development. These clusters are: (1) health care and biotechnology; (2) utilities and telecommunications; (3) travel and tourism; (4) education; (5) public and nonprofit service; (6) financial service; (7) engineering/environmental services; (8) manufacturing, publishing, and printing; (9) business and managerial services; and (10) retail and wholesale. In federal school-to-work language, these are career majors.

The PIC, through the industry clusters, will certify the categories of involvement in work-based learning for employers. The three categories of employer involvement identified by the PIC are:

- ***Paid work experiences.*** These employer options include summer jobs, part-time jobs, and hiring of graduates.
- ***Career education.*** Employers may be involved in curriculum development and classroom participation; job shadowing and mentoring; internships and field experiences; and career exploration sequences.
- ***Youth apprenticeship.*** This model includes work-based curriculum and detailed training plans for students; full integration with classroom instruction; restructured workplace; priority hiring commitments for students in career paths.

The PIC envisions that business partners will assist in planning once individual high schools develop leadership teams to implement school-to-career programs at all grade levels.

This expansion is already taking place in some Boston high schools, such as Brighton High School, Boston's health careers' magnet, which houses the city's School of Health Professions. ProTech is the most structured, work-based learning opportunity offered by the school. However, the school also offers a "medical industry collaborative" (MIC) option. Both ProTech and MIC students take the same core courses in high school and attend the same classes. However, they do not work with the same employers. Currently, the PIC career specialist at Brighton High School places approximately 50 seniors in the MIC program in paid internship slots. In two years, as the program goes to scale, approximately 200 slots will be needed. The ProTech lead coordinator for health care said that not all of these slots will be paid--some might be clinical rotations, four-week case studies, or unpaid internships. Hospitals and health care organizations unable to offer paid positions will provide work-based learning experiences for students in MIC and in "career education" type programs. Those providing guaranteed multi-year paid jobs will become ProTech employers. According to the lead coordinator, MIC students will not be placed at ProTech hospitals because they are already "completely saturated" with ProTech students.

Growth of Employer Involvement

The chair of the health care cluster responsible for employer recruitment in the industry believes that student involvement in ProTech health care placements can grow from its current level of 185 to 300 student participants once more employers are recruited. The health care lead coordinator plans to recruit three more hospitals to take approximately 55 students for the 1995-96 school year. All but one of the hospitals participating in the 1994-95 school year will create slots for these students.

The industry coordinator expects to recruit additional financial service employers now that the program is established. He predicts that the financial services program might easily double in size. Two large financial services employers anticipate growing from their present level of ProTech student involvement of 10 to 20 students to a maximum of between 35 to 50 students.

In 1994-95, 21 employers participated in ProTech. ProTech's director envisions this number increasing to more than 100 employers in three to four years. She hopes that these employers will become a "political force" that can influence what goes on in schools as the city develops its school-to-career system.

In order to institutionalize connecting activities, the PIC filed legislation in the Massachusetts state legislature that would require $2.00 worth of private-wage commitment to students participating in work-based learning to leverage every $1.00 of public funding used to fund connecting activities (e.g., Career Specialists) between the schools and employers.

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Context for Work-based Learning Program

This case study focuses on two programs that offer Philadelphia high school students work-based learning opportunities. One program--the Philadelphia High School Academies--is coordinated by an employer-funded entity called High School Academies, Incorporated but is an official program of the Philadelphia Public Schools. The program originated in 1969, when the CEO of the local electric company in conjunction with school officials established an Academy to prepare students to work in the electric industry. Structurally, the Academies are small schools-within-schools that combine work-related curriculum with afterschool and summer job experiences.

The other program, which began in the 1992-93 school year--Education for Employment (EFE)--established a metalworking/manufacturing program affiliated with the Pennsylvania Youth Apprenticeship Program. Funded by the School District of Philadelphia, it is modeled on the federal School-to-Work Opportunities Act. The program includes work-related curricula, structured full-day workplace experiences, and mentoring. Like the academies, EFE uses school-within-a-school clusters to house its programs.

Community Context

The School District of Philadelphia, the fifth-largest district in the nation by enrollment, serves a racially and ethnically diverse population. In 1993-94, 208,900 students were enrolled in 43 neighborhood and magnet high schools, vocational-technical schools, skills centers and special schools; 41 middle schools; and 172 elementary schools. The district's ethnicity is: 63 percent African American; 22 percent white; 11 percent Latino; 5 percent Asian; and .2 percent Native American.

Under the leadership of new superintendent David Hornbeck, the district is undergoing significant restructuring. The superintendent's salary and tenure are explicitly linked to demonstrable improvement in student outcomes, including successful posthigh school outcomes. School-to-work activities, such as curriculum-related work experience for all students before graduation, are an important component of the superintendent's overall plan. Therefore, Philadelphia should continue to foster an environment in which work-based learning programs can thrive. Although several work-based learning programs are currently available to students in the district, High School Academies, Inc. and EFE are the two largest, most structured programs.

Program Structure of the High School Academies

The Academies are a business-driven, business/education partnership program that combines academic studies with occupational training in 11 career areas, including: business, health care, environmental technology, electrical science, automotive science, fitness and health promotion, horticulture, law and public administration, aviation and aerospace, hospitality, and communications. The program also adds new career areas promoted by the business community. The Academies operate primarily as either schools-within-schools or--as they are referred to by program staff-- "small learning communities." The primary goals of the program are to:

- increase student attendance rates
- improve student performance
- develop student respect for the value of education and a healthy work ethic
- increase student graduation rates
- encourage students to pursue either postsecondary education or employment after graduation

About 4,500 students were enrolled in the Philadelphia High School Academies during the 1994-95 school year. Students may choose to enroll in any of the 28 Academy programs located in 19 high schools across the city. (Some schools have more than one Academy program.) Each Academy has its own core group of teachers and career-focused curricula. Students in a career area are grouped in grades 9 to 12 according to their Academy classes. Ninth and tenth graders not only take classes integrating academics with work-related topics but also participate in such career-awareness activities as job-shadowing and mock interviews. Eleventh and twelfth graders continue their academic training and career-awareness activities, and selected students participate in either afterschool and summer job experiences at actual worksites or simulated work experiences on campus.

The Academies' main goals for students in work-based learning include:

- To apply information learned in Academy programs in the business world

- To experience the world of work
- To develop a resume that will enable them to secure better jobs in the future

Selection of students for work-based learning experiences. Academy teachers and program coordinators select students who interview with employers based on their academic record, job readiness, and expressed interest to work in a particular industry area. The program's job recruiter, who maintains resumes for all participating students, sends five resumes she considers appropriate to each employer interested in hiring a student. Employers interview and hire students for positions as regular employees. Other than in the area of health, most students participating in work-based learning experiences are from the Business Academies.

Program governance. Each of the 11 occupational programs with Academies is managed by its own unique Board of Governors. The governors are volunteer representatives of industry who are responsible for maintaining the program's relationship with the private sector. Board members work closely not only with individual Academy programs but also with Academies involved in their industry area as a group.

Academies, Inc. is led by an oversight Board of Directors, which is composed of chief executives and representatives from businesses, the School District of Philadelphia, labor and community organizations, and the chairperson of each Board of Governors.

Employer commitment. Members of each occupational area's board of governors (all of whom are industry executives at organizations that employ students) act as "affiliators"--as the program calls them--for their individual Academies. Affiliators are involved in many areas, including assisting with recruitment of additional employers; helping teachers to develop appropriate curriculum; providing financial support; working with teachers and staff to identify problems and devise solutions; financing field trips; arranging mock interviews for students; assisting teachers in providing employability skill training; and providing job slots. As members of the Board of Governors, affiliators also assume indirect responsibility for all of the Academies within the occupational cluster.

Program Structure of Education for Employment Initiative

Philadelphia's Education for Employment initiative is a more structured program than the Academies in the sense that it provides closer ties between school and work. EFE operates in 15 high schools and five occupational areas, including health, business and finance, hospitality, printing and graphic arts, and metalworking/manufacturing. EFE plans to add transportation as the sixth occupational area next year. Ten high schools housing EFE programs also sponsor Academies, although the occupational focus of the two efforts is sometimes different.

The goals of the EFE program are:

- To expose Philadelphia youth to diverse career opportunities
- To prepare young people academically, technically, and socially for postsecondary education and for high-skilled employment that promotes life-long learning and fosters success
- To provide students with information, experience, and support so that each one can make informed decisions about career goals and life choices
- To encourage employers to train today's youth for tomorrow's jobs

EFE operates school-within-a-school programs, based on Academy and youth apprenticeship models. The program provides an integrated school-based curriculum that infuses work-based learning experiences throughout. Ninth and tenth graders taking academic classes integrated with industry-related curriculum participate in work-related experiences, such as job shadowing, mock interviews, and career-awareness activities. Eleventh and twelfth graders continue to take the academic/work-related classes, and they also participate in structured, paid work-based learning opportunities one full day per week. Some twelfth graders work two full days each week.

Student participants. A total of 1,400 students were enrolled in EFE programs in the 1994-95 school year. Because only students in grades 11 and 12 participate in structured work-based learning experiences, only about 200 students currently hold program-related jobs. The majority of students (144) work in the health care field, largely because of the success of the HealthTech 2000[2] program, in which current Academy students are included. So far, no students in the printing and graphic arts program participate in work-based learning, although they will in the future. EFE school and program staff send appropriate students to interview with employers; employers then decide which student to hire.

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[2] Some EFE health programs and Academy health programs are located in a joint EFE/Academy effort called HealthTech 2000. Five of six Health Academies are HealthTech 2000 sites, and the remaining site will open in September 1996. Although EFE and Academy staff work together to recruit employers, the two programs retain their own governance structure. However, EFE and Academies staff have discussed coordinating other occupational programs.

Program governance. EFE programs have stakeholder groups at each school consisting of employers who offer work-based learning opportunities, EFE teachers and staff, parents, and students. By design, employer participation in these stakeholder groups varies by industry program. Although some participate in stakeholder meetings monthly, others participate only twice a year. The purpose of these meetings is to (1) share information on new developments and technology in the industry; (2) discuss concerns and/or successes about the work-based learning component; (3) advise on the academic and technical curriculum; and (4) establish performance benchmarks for students and the program. Through these stakeholder groups employers can influence the program's design and offer their advice on such issues as the most appropriate textbooks for learning their occupations. Not all employers who offer work-based learning are members of the stakeholders groups.

Employer commitment. EFE programs require employers to have not only an on-site coordinator to oversee the program but also a mentor or supervisor for each student. The on-site coordinator, who is appointed by the employer at the work-site, recruits mentors and serves as the main point of contact for mentors, students, and school system personnel.

Mentors work with teachers and EFE staff to write individual work plans for students. Mentors are expected to follow the training plans, informally assessing and evaluating the students' progress regularly. Moreover, mentors use a comprehensive performance appraisal form to formally assess students twice during the two-year training period. EFE requires all mentors to participate in a mentor training program conducted by a community-based organization. All mentors for the in-coming fall students meet one another at that training session. Besides basic mentoring skills, mentors learn how to write students' work-place learning plans.

As students' skill levels rise, mentors, work-site coordinators, teachers, and the students themselves modify the training plan collectively, each revision expanding the scope and level of difficulty of the student's work. According to the EFE director, the mentor's role is key to the success of the program.

School commitment. Site coordinators are school-based staff responsible for EFE activities at a specific high school. Each site has one coordinator for each occupation. The coordinator is also a teacher and the team leader at the school. Site coordinators help develop student work plans. Besides the site coordinators each school must have a school-based occupational team--one teacher from each of the academic subjects and a technical teacher--all of whom apply through the principal to become team members. The team is responsible for teaching the integrated curriculum, maintaining relationships with students and employers, attending training, and participating in work-based internships with employers.

The current structure of the work-based learning places a heavy workload on the site coordinators who are full-time teachers with no free period. According to the EFE director, if schools were to restructure into small learning communities and implement block scheduling of students, the teachers would have more joint planning time, and the coordinator more time to work closely with employers.

Academies and EFE: Similarities and Differences

Program comparison. Small learning communities are the centerpiece of the Academies, an approach that EFE has integrated into its own program. Although EFE is based on the Academy program in some ways, there are fundamental differences between the programs as well.

Primarily, EFE is a more structured program in which employers assume specific responsibilities for students while providing certain job experiences as part of the program. In the Academies program the roles and responsibilities of employers are left more to the discretion of individual employers. However, the Academies program seems to foster closer ties between employers and the individual programs. Because the Academies were initiated by the business community, employers who feel ownership for the program assume direct responsibility for the success of their students. In contrast, EFE is driven by the school district's school-to-work agenda. EFE developed the framework for school-to-work, approaching employers to solicit their involvement. Consequently, the EFE program's level of involvement and ownership of the employers is less developed than that of the Academies program.

The following table summarizes how the programs compare across several core components.

Employer Recruitment

Industry Selection

Academies. Academy industry areas are typically industry-driven. The Academies, Inc. organization adds industry-related programs once employers or district staff have expressed interest. For example, a district staff person might approach employers to "get a business constituency" to start an industry-area program should they feel the market was right for entering that area. Academy decisions in this area depend quite a bit "on the ripeness of the business community," according to program staff.

Program Component	High School Academies	EFE
Coordinating Entity	Corporate-sponsored Academies, Inc.	District-funded Education for Employment Office
Governance Structure	11 Industry-area Board of Governors made up of top-level industry executives; Board of Directors oversees Academies, Inc.	Five stakeholders groups by occupation areas composed of employers and school site coordinators
School-site Structure	School-within-a-school; core team of teachers; students block-rostered 9-12	School-within-a-school; core team of teachers; students block-rostered 9-12
Grade Level of Work-Based Learning Experience	11, 12	11, 12
Time/Duration of Work-Based Learning Experience	After school and summer; varies by industry	One full day per week; school year
Student Participants of Work-Based Learning	Interested students in selected industry areas	All students in all industry areas; teachers recommend students for job slots
Structured Work-Based Learning Plan?	No formal plan; Academies, Inc. job recruiter monitors job-experiences for work-related appropriateness	Formal work-based learning plan co-authored by site coordinator, mentor, student, and teacher
Employer-based Mentor for Student?	Varies by employer	Mentor required; formal mentor training provided by program

EFE. The industry areas comprising the EFE program were determined through a market research study conducted by Temple University in 1991 and through discussions with industry associations in the area.[3] EFE staff also talk to industry-area people and local trade association representatives to determine potential growth in an occupation area.

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[3] Although metal-working/manufacturing was not determined to be a major growth occupation, the occupational area was included, on a limited basis, because it was the metal-working/manufacturing industry, through the Pennsylvania Youth Apprenticeship program, that initiated the EFE program.

Recruitment Strategies

Academies. Most of the job slots for students are provided by employers with whom Academies, Inc. has had long-standing relationships. Employers need only call the Academies, Inc. office and request students to fill positions. Companies represented on the Boards of Governors and the Board of Directors provide job opportunities. Current Academy employers sometimes refer colleagues in other companies to the Academies as well.

The job developer for Academies, Inc. uses a variety of methods to identify potential student positions, including: placing advertisements, exchanging business cards, networking through professional organizations, and attending Chamber of Commerce functions. To potential employers she sends a letter not only describing the programs but also encouraging them to use the Academies as a resource pool for part-time help. The job developer follows up the letter with a telephone call, generally to a human resources manager or another staff member, requesting an appointment.

EFE. The EFE approach to recruiting is similar to that used by the Academies; in fact, it was designed following discussions with Academy staff. However, because the EFE program is less established, its recruitment efforts are more intensive. At EFE, employer recruitment in occupational areas other than health is the responsibility of occupational project coordinators and employer recruiters. First hired in the fall of 1994, employer recruiters work full-time recruiting employers and report to the project coordinators who spend a portion of their time recruiting employers.

Besides following leads identified by the project coordinators, recruiters gather information about potential employers from local newspapers and industry publications, by attending career fairs, and through current-employer referrals. The recruiters send the employers solicitation letters along with a brief survey inquiring about their interest in participating in an EFE program and requests a response. Through telephone calls the recruiters follow up on the responses and make appointments, at which time the project coordinator usually joins the recruiter to explain the program further. The recruiters believe this approach is effective, estimating that about 50 percent of the employers with whom they meet participate in the program in some way.

According to EFE staff, the individual contacted within a business varies by occupation and by size of employer. For smaller employers (i.e., manufacturing), recruiters often contact the owner or chief executive officer directly; for large employers, they contact the vice president for human resources or public relations. In the business/finance program, the project coordinator prefers to meet with an executive of the firm or facility to secure the "buy-in" once the recruiter has made the initial contact. The coordinator wants not only to assure that the employer understands the program but also to determine whether the place of employment is appropriate for student learners. The recruiter will then work with whom the executive designates as a point of contact.

EFE staff provide employers with the details of the program and the specifics of their commitment, including (1) identifying a mentor for each student, (2) allowing mentors to attend mentor training, and (3) paying the students' wages. All employers also are invited to participate in the stakeholders group.

Employers generally have a number of questions about the program before they agree to participate; many of them may require two or three contacts before they make a commitment. Their questions include detailed inquiries on the duties and responsibilities of the mentors; determining how rigorously to follow the training plan; establishing whether students can work additional hours beyond those determined through the school-to-work program (state law limits high school students to 28 hours of work per week); assigning who will secure working papers for the students; and scheduling student availability during school vacations.

Recruiters offer employers a range of workplace experiences they may provide for students in EFE programs. Beginning with the most demanding--structured work-based learning--recruiters then explain levels of participation requiring less of a commitment, such as internships, job-shadowing, and site visits. EFE is currently developing a list of all of the school-related activities involving employers throughout the city, which will be available by the 1995-96 school year.

HealthTech 2000. Academy and EFE health project coordinators work together to recruit HealthTech 2000 employers. Initially, EFE proposed the idea of a joint program to Academy staff, an inspiration that received Board approval for the initiative. Most HealthTech 2000 employers have previously been involved in Academy summer job programs (some of which were funded by the Private Industry Council's JTPA funds) where students work at the institution from two to 28 hours per week during the summer. The HealthTech 2000 program has the most in-depth structure of the programs linking employers with high school students in Philadelphia. In fact, many HealthTech 2000 employers, who formerly provided summer work experiences to Health Academy students, view the more structured training plan and longer work-based learning experience offered by the HealthTech 2000 program as a definite improvement over the Academies' previous curriculum.

Motivations for Employer Involvement

Philadelphia employers identified a number of reasons for their participation in one, or both, of the work-based learning initiatives described in this case study. The major benefits employers expected from their participation in the programs were relatively consistent across occupational areas and types of firms/organizations. The benefits that employers most frequently identified were: (1) the satisfaction employers received from helping students not only to learn about the work-world but also to explore options for productive future employment and (2) the working contributions of the student learner to the organization.

Commitment to Young People and the Community

All of the employers cited a commitment to their communities as a major reason for their participation in work-based learning. Employers were also motivated by their need to prepare a skilled community workforce. A representative of one teaching hospital said, "If we ignore our future workforce, we shoot ourselves in the foot."

Student Contributions

Although employers emphasized that they did not offer work experiences to students based on the student's ability to lighten the workload of regular employees, they often mentioned students' productivity as a major benefit of having students in the workplace. A health employer participating in both HealthTech 2000 and summer Health Academy programs noted that students "helped us tremendously, since we are faced with the challenges of cutting back. There is more work with less people. Students pick up some of the slack." The Academy's job developer noted that student productivity was the primary reason why most Business Academy employers participated in the program. EFE mentors found that the students stimulated their workdays by asking thoughtful questions and breaking up the monotony of their daily routines. Mentors also found that student learners could assume some of their own workloads, freeing them to accomplish other tasks.

Other Factors

Previous experience working with students. Another factor affecting employers' decisions to participate included their history of involvement with the Philadelphia High School Academies;

providing summer jobs for students through JTPA and the Academies; partnership relationships with local high schools; and the executives' personal desires to become involved. For example, most HealthTech 2000 employers previously participated in summer Academy health programs.

Peer pressure. Both EFE and Academies, Inc. staffs believe that participating employers who apply peer pressure motivate their competitors to join the programs. A hospital representative noted that the relationship with another hospital whose CEO sits on the Health Academy Board of Governor's was a primary reason for his involvement: "We have a close relationship...through that we became involved," he stated. An Academy finance employer noted that the program has "a ripple effect." One employee told her fiancé about the program; the company for whom the fiancé works decided soon after to participate. There is a chain reaction.

Competition. The desire for a competitive edge, along with peer pressure, makes many employers want to participate in work-based learning. For example, in the area of hospitality, an EFE recruiter noted that several hotels have provided work-based learning experiences once they learned their competitors were doing the same. An executive at an Academy finance work site noted one reason her organization participates is for the opportunity to "rub shoulders with all the other board members and see what they are doing with their students and the community."

Program credibility: HealthTech 2000. Many employers in the health care industry have been involved with the Academies program since the Health Academies began operation in 1982. It was the strength of this long-term relationship together with the high regard employers have for the Academies programs that assisted the EFE initiative in establishing the jointly administered HealthTech 2000 program. An endorsement by the Health Academies Board of Governors--whose members' organizations also provide the majority of the work-based learning slots--gave HealthTech 2000 a significant level of credibility in the eyes of employers right from the start.

Disincentives to Participation

Employers or (potential employers) of the two work-based learning programs mentioned two primary disincentives to either participating or expanding their participation:

- Employers assess that participating in structured work-based learning is too costly

- Employers find that organizational changes, such as restructurings, downsizings, and leadership changes, create an environment into which it is difficult to introduce student learners

However, according to both EFE and Academies, Inc. staff, no employers have discontinued their relationship with either program despite the disincentives they identified.

Costs to Employers

Between the two programs, the costs to employers participating in the EFE program are more easily identified. The EFE program specifically requires that employers provide the staff time of mentors and work-site coordinators. Employers participating in the Academies program have fewer programmatic requirements that can be directly identified as costs; however, the costs of participating in the program are still an issue. Both programs require employers to cover the cost of wages earned by the students in occupations other than health (see below).

Some employers indicated that the investment in student workers is returned to the employer within a short period of time--one to eight weeks--by the productivity of the student. They said that staff-related costs are most significant during the interview process and the development of the individualized student training plans. Once these two major activities are completed, the students do not require a significant investment of staff time. However, not all employers share this opinion, and for many, expenses remain a concern.

For example, some EFE employers indicated that the added responsibility along with the related time required by the work-site coordinators was a potential obstacle to their participation in work-based learning. Employers estimated that work-site coordinators divert up to 40 percent of their workhours during those months when students are being interviewed and evaluated on program duties. Considering school-to-work is only one of their many responsibilities, this burden is too much for some employers.

Although most employers interviewed who hired one or two students were not overwhelmed by the cost of student salaries, many indicated that they would increase the number of student learners only if their budgets so allowed. Also, budget cuts within the organization can require fewer people to do more work, leaving less time for work-based learning.

HealthTech 2000. In health care the issue of scarce resources is especially prominent because many hospitals, as a result of downsizing, are requiring more work of current staff. However, many hospitals maintain a volunteer coordinator who can help to accommodate the involvement of student learners. Another advantage to hospitals of the Health Tech 2000 program is that the EFE pays students' wages at a few hospitals to help launch the program. The program expects in-kind contributions from employers to offset the cost of subsidized wages. (Firms employing students in other occupations pay for the students' wages out of their budgets.) The EFE director indicated that she hopes to phase out EFE-paid wages in health care. It remains to be seen what effect the termination of the wage subsidies will have on employer participation.

Organizational Changes

Many employers believe that restructuring and downsizing within their organizations may later affect their ability to expand further the number of learning opportunities for students. Employers find it difficult to justify hiring student workers to current employees while others are being laid off. However, despite such organizational changes, the programs remain intact. The primary reason employers gave for the limited effect of downsizing on current program activities was that their executive staff felt school-to-work programs were a necessary community commitment rather than a workforce preparation issue. Within businesses this viewpoint reduces political pressure to terminate student learners. For example, the local health care union that is supportive of the HealthTech 2000 program has conducted a significant amount of research that supports the concept that future jobs in the health care industry will require postsecondary education, a premise that is a basic tenet of the program.

Reasons Non-participating Employers Give for Not Participating

EFE employment recruiters indicated the reasons most frequently given by employers for not participating in the program were the same as the disincentives identified by participating employers: downsizing, insufficient room in their budgets, the lack of staff available to serve as mentors, restructuring, and new leadership in the firm. The Academy job developer agreed that downsizing together with insufficient funds were the main reasons employers choose to abstain from that program too.

One non-participating Philadelphia health care employer recruited by EFE indicated that budgetary and downsizing are indeed his organization's major reasons for not participating in work-based learning. Noting that the program requires a work-site coordinator to oversee students' learning, he pointed out that the program is "difficult to sell when we are being pushed so hard to reduce costs."

Role of Coordinating Entities

Academies, Inc.

As a result of two evaluations of the Academies program in 1988, the individual Academies, which had been managed separately, were merged with the Philadelphia High School Academy Association and renamed the Philadelphia High School Academies, Inc. This consolidation was intended to improve program efficiency and facilitate program coordination. Academies, Inc. acts directly as the coordinating body for the Academies program, building partnerships with business and facilitating communication among the schools, individual staff members from the Academies, boards of governors, employers, parents, and students. Academies, Inc. works to develop new programs, set policy, and maintain the Academies on an ongoing basis.

The Academies, Inc.'s department of student and employment services helps students to become job-ready. Department staff also recruit and fill job slots. A manager oversees all departmental operations. A job developer works with schools and employers to develop work opportunities for students. Program coordinators are each responsible for several academies, working one-to-one with the students and often recommending students for positions. All staff in this department have business backgrounds.

In terms of worksite interactions, The Academies, Inc.'s role as coordinating body is in some ways less demanding than that of EFE. Academy staff require employers to provide neither coordinators nor mentors; nor are they required to evaluate students. However, Academy staff do screen employers to ensure a safe workplace in which students will gain knowledge of the work world. The Academy job recruiter views the role of participating employers as that of a troubleshooter. "We do ask that if there is any problem--employers call us. We troubleshoot and intervene if we can help. Before students get fired, we ask employers to talk to us so we can work with the student."

Education for Employment

EFE staff believed that there was no need for an intermediary organization within the structure of their program. In fact, one project coordinator for the school-to-work program specifically said that she does not believe in intermediaries because they reduce the direct contact between the teachers and employers. Nevertheless, the director of the Education for Employment Office indicated that she would like the Academies, Inc. to become the intermediary for all school-to-work efforts because of the great rapport they have with employers. However, such a change in structure is, at this point, only in the planning stages, and Academies, Inc. staff note that reaching an agreement would require negotiation. However, the EFE office does function as a coordinating organization.

The Education for Employment Office includes a project director, a project manager, five project coordinators, and two employer recruiters. The project director and project manager are responsible for the overall development and implementation of the school-to-work effort. The project coordinators (one per occupation) implement their area-specific programs and are also responsible for developing the curriculum and the framework for the students' training plans, working with employers to develop work-based learning opportunities, and following up with work-site coordinators. The employer recruiters are primarily responsible for developing work-based learning slots with employers.

Outcomes

Student Outcomes

Although employers did not share quantifiable outcomes, the Academies, Inc. staff believe that employer support for the Academies is consistent because the program can provide outcome data on the success of Academy students. For example:

- Although the overall attendance rate for economically disadvantaged students in Philadelphia was 74 percent, the attendance rate for Academies students was 87 percent as of June 1994
- Higher than the graduation rate for the district overall,
  the graduation rate for Academies students was 94 percent for the 1993-94 school year

- Of the 1992 senior class, 54 percent went on to college, 5 percent entered trade school, 3 percent entered the military, and 23 percent joined the workforce, with only 12 percent remaining unemployed

These data show employers that the experiences students get in the Academies make a difference and that their investment is worthwhile.

EFE staff also mentioned that they plan to record data on students 18 months after graduation. More than 90 percent of students in the HealthTech 2000 program in 1993-94 completed the year, and 65 of 101 students in the program were accepted to colleges.

Increased Employer Commitment

More employers are joining both programs, and no employers have dropped out after their first or second year with the program. In fact, according to the EFE director, that program currently has more work-based learning slots available than qualified student learners to fill the slots. Employers typically began with a limited number of students, viewing this first experience as a trial period, and then expanded their involvement based on initial success with these students and the availability of funds in their budgets.

Another way of measuring employer involvement as an outcome is the willingness of employers over time to increase their level of participation in work-based learning. For example, many of the health employers began their relationship with EFE through the High School Academies. The EFE program is significantly more demanding of employers, requiring their participation in the development of training plans along with relatively extensive evaluations and assessments. Employers therefore expand their commitment and participation as they move from a less structured, less demanding cooperative education placement or summer job to the EFE's more structured, intense work-based learning component.

Community Service Participation

Some employers discussed anticipated and actual outcomes in terms of "assisting the community." One employer of finance Academy students said, "I get warm fuzzy feelings for helping [the students]." None of the employers indicated that they are participating because they expect to hire these students directly out of high school or college, although some said they would gladly hire the students to work for them during college, on a part-time basis.

Unanticipated Benefits of Participation

Improved perceptions of urban students. Current employer participants of both programs assumed that the students they were hiring for work-based learning would be nonproductive, ill-prepared for the world of work, or unreliable. However, all employers interviewed were pleasantly surprised that their expectations had been wrong. Employers indicated that the students contributed substantively soon after joining the workplace; in fact, they were responsible, dressed appropriately, and were eager to improve.

Employers were most surprised by the productivity of the students. Employers were impressed not only with the quality and quantity of work students produced during their work-based learning experience but also with the students' maturity and work ethic.

Employers said that their experiences with the students through the work-based learning component of school-to-work is renewing their faith in the school system. It is obvious to the employers that "someone must be working with these kids" or they would not be as prepared for the work place as they are. Thus the school district's relationship with employers may improve through the school-to-work program and the superintendent's education reform initiative.

One HealthTech 2000 employer indicated that he was pleased that out of seven student participants in the program last year, six went on to college and the seventh entered the military. All students said that they intended to pursue careers in the health care field.

Plans for Future Expansion of Work-based Learning

The School District of Philadelphia's superintendent envisions school-to-work as an important part of the district's effort to reform education. He has set a goal of establishing 10,000 work-based learning opportunities for students within the next five years to facilitate this reform effort. Although the Academies, Inc. and EFE programs are a good start, the superintendent's goal is ambitious.

The Academies Inc. plans to expand its student enrollment; EFE plans to increase the number of industry foci. By 1996, the Academies, Inc. plans to enroll 5,000 students--which represents an increase of about 500 students from its current enrollment. EFE's goal is to expand into the transportation cluster in school year 1995-96, expand the work-based learning component into a year-round effort, and provide students with a structured summer work experience.

The EFE staff and the Academies, Inc. staff continue to recruit additional employers in the health and finance industries. They have found that if they can secure the involvement of a key employer in the respective industries, other employers, according to Academy staff, will "join the band wagon." However, at the time of this study, there was no strategic plan for expanding employer involvement.

The question of employers' reaching a saturation point was one that most employers left unanswered. Because employers' budgets are fluid, their ability to provide work-based learning is contingent on having the adequate funds. Those health care institutions going through restructuring indicated that probably five or six students were all that they could "politically" afford, even though the students were not a threat to full-time employees. To those employees it was more a matter of perception--for example, parents being laid off while students are being hired. The longevity of employers' involvement was also unclear. If the Academies, Inc. is any indication of length of employer involvement, one might assume that employers see this as a long-term commitment.

Appendix B

Survey Results

Ratings of Incentives to Participation in Work-based Learning

Percent of Employer Respondents Who Said That the Following Incentive Is (Was) The Strongest for Their Organization's Participation in Work-based Learning

Incentive Rated Number 1 in Importance for Participation in Work-based Learning	Total Employers Surveyed (Current and Former Employer Participants) (N = 73)	Current Employer Participants (N = 54)	Former Employer Participants (N = 19)
Concern about current or future shortages of skilled labor due to growth or changing technology	15%	15%	16%
Opportunity to train future employees	15%	17%	11%
Need for higher skilled entry-level workers	12%	9%	21%
Current labor shortage	10%	7%	16%
Concern about quality of education	7%	9%	0
Desire to become involved in school improvements	7%	9%	0
Other	7%	6%	11%
Good way to attract minorities to organization	6%	7%	0
Creation of community good will	4%	4%	5%
Opportunity to offset costs by receiving prescreened potential employees	4%	4%	5%
Opportunity to network with schools	3%	4%	0
Opportunity to make organizational investment in community	3%	2%	5%
Opportunity to attract young workers for organization's aging workforce	3%	0	11%
Contributes to organization's positive image in community	1%	2%	0
Work-based learning is established tradition of the industry field	1%	2%	0
Opportunity to observe or "try out" potential employees	1%	2%	0

Percent of Respondents[1] Answering "Primary Benefit" or "Strong Benefit" for Employer Participation in Work-based Learning

Incentive	Total Employer Respondents (N = 73)	Current Employer Participants (N = 54)	Former Employer Participants (N = 19)	Coordinators (N = 15)
Concern about quality of education	77%	83%	58%	100%
Desire to become involved in school improvements	87%	91%	74%	100%
Opportunity to network with schools	73%	70%	79%	87%
Opportunity to make organizational investment in community	82%	83%	79%	80%
Creation of community good will	64%	69%	53%	73%
Contributes to organization's positive image in community	74%	78%	63%	(question not asked)
Desire to contribute to effort supported by other employers or industry	51%	46%	42%	74%
Concern about current or future shortages of skilled labor due to growth or changing technology	85%	87%	79%	93%
Need for higher skilled entry-level workers	81%	83%	74%	100%
Opportunity to attract young workers for organization's aging workforce	58%	59%	53%	74%

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[1] The 13 employers surveyed who were non-participants of work-based learning were not asked questions concerning incentives.

(Continued)
(Percent of Respondents Answering "Primary Benefit" or "Strong Benefit" for Employer Participation in Work-based Learning)

Incentive	Total Employer Respondents (N = 73)	Current Employer Participants (N = 54)	Former Employer Participants (N = 19)	Coordinators (N = 15)
Current labor shortage	52%	47%	63%	(question not asked)
Work-based learning is established tradition of the industry field	45%	38%	63%	40%
Good way to attract minorities to organization	47%	47%	47%	60%
Good way to attract women to organization	42%	45%	37%	60%
Some labor costs offset if positions are subsidized	16%	8%	39%	27%
Opportunity to offset costs by receiving prescreened potential employees	39%	32%	61%	67%
Opportunity to observe or "try out" potential employees	59%	61%	58%	73%
Opportunity to provide professional development to current employees	53%	50%	61%	53%
Opportunity for employers to reexamine their organization's training	44%	41%	53%	(question not asked)
Opportunity to train future employees	77%	78%	74%	100%

Respondents' Combined Ratings of Incentives for Participation in Work-based Learning (number & percent)

Incentive	Not a Benefit	Minor Benefit	Strong Benefit	Primary Benefit
Desire to Contribute to the Improvement of Education and the Community				
Concern about quality of education	4 6%	13 18%	37 51%	19 77%
Desire to become involved in school improvements	3 4%	7 10%	50 69%	13 87%
Opportunity to network with schools	1 1%	19 26%	39 53%	14 72%
Opportunity to make organizational investment in community	2 3%	11 15%	40 55%	20 82%
Creation of community good will	5 7%	21 29%	33 45%	14 64%
Contributes to organization's positive image in community	1 1%	18 25%	41 56%	13 74%
Desire to contribute to effort supported by other employers or industry	4 6%	31 43%	29 40%	8 51%
Desire to Attract New Employees				
Concern about current or future shortages of skilled labor due to growth or changing technology	1 1%	10 14%	27 37%	35 85%
Need for higher skilled entry-level workers	3 4%	11 15%	26 36%	33 81%
Opportunity to attract young workers for organization's aging workforce	13 18%	18 25%	26 36%	16 56%
Current labor shortage	16 22%	19 26%	27 38%	10 52%
Good way to attract minorities to organization	14 19%	24 33%	24 33%	10 47%
Good way to attract women to organization	17 23%	25 34%	22 30%	9 42%
Opportunity to train future employees	3 4%	14 19%	40 55%	16 77%

(Continued)
(Percent of Respondents Answering "Primary Benefit" or "Strong Benefit" for Employer Participation in Work-based Learning)

Incentive	Not a Benefit	Minor Benefit	Strong Benefit	Primary Benefit
Desire to Reduce Costs of Recruiting New Employees				
Some labor costs offset if positions are subsidized	42 62%	15 22%	9 13%	2 15%
Opportunity to offset costs by receiving prescreened potential employees	20 28%	23 32%	24 34%	4 40%
Opportunity to observe or "try out" potential employees	7 10%	22 30%	38 52%	6 8%
Opportunity to Make Improvements within the Company				
Opportunity to provide professional development to current employees	12 17%	22 31%	31 43%	7 10%
Opportunity for employers to reexamine their organization's training	15 21%	26 36%	30 41%	2 3%

Current Employer Participants
Ratings of Incentives for Participation in Work-based Learning
(number & percent)

Incentive	Not a Benefit	Minor Benefit	Strong Benefit	Primary Benefit
Desire to Contribute to the Improvement of Education and the Community				
Concern about quality of education		9 17%	29 54%	16 30%
Desire to become involved in school improvements		5 9%	39 72%	10 19%
Opportunity to network with schools	1 2%	15 28%	25 46%	13 24%
Opportunity to make organizational investment in community	2 4%	7 13%	30 56%	15 28%
Creation of community good will	5 9%	12 22%	27 50%	10 19%
Contributes to organization's positive image in community	1 2%	11 20%	33 61%	9 17%
Desire to contribute to effort supported by other employers or industry	3 6%	21 40%	23 43%	6 11%
Desire to Attract New Employees				
Concern about current or future shortages of skilled labor due to growth or changing technology	1 2%	6 11%	19 35%	28 52%
Need for higher skilled entry-level workers	1 2%	8 15%	21 39%	24 44%
Opportunity to attract young workers for organization's aging workforce	11 20%	11 20%	18 33%	14 26%
Current labor shortage	14 26%	14 26%	18 34%	7 13%
Good way to attract minorities to organization	12 23%	16 30%	18 34%	7 13%
Good way to attract women to organization	14 26%	16 30%	17 32%	7 13%
Opportunity to train future employees	2 4%	10 19%	28 52%	14 26%

Percentages may not total 100% due to rounding.

Incentive	Not a Benefit	Minor Benefit	Strong Benefit	Primary Benefit
Desire to Reduce Costs of Recruiting New Employees				
Some labor costs offset if positions are subsidized	35 70%	11 22%	3 6%	1 2%
Opportunity to offset costs by receiving prescreened potential employees	17 32%	19 36%	14 26%	3 6%
Opportunity to observe or "try out" potential employees	6 11%	15 28%	28 52%	5 9%
Opportunity to Make Improvements within the Company				
Opportunity to provide professional development to current employees	11 20%	16 30%	22 41%	5 9%
Opportunity for employers to reexamine their organization's training	12 22%	20 37%	22 41%	

Percentages may not total 100% due to rounding.

Former Employer Participants
Ratings of Incentives for Participation in Work-based Learning
(number & percent)

Incentive	Not a Benefit	Minor Benefit	Strong Benefit	Primary Benefit
Desire to Contribute to the Improvement of Education and the Community				
Concern about quality of education	4 21%	4 21%	8 42%	3 16%
Desire to become involved in school improvements	3 16%	2 11%	11 58%	3 16%
Opportunity to network with schools	0	4 21%	14 74%	1 5%
Opportunity to make organizational investment in community	0	4 21%	10 53%	5 26%
Creation of community good will	0	9 47%	6 32%	4 21%
Contributes to organization's positive image in community	0	7 37%	8 42%	4 21%
Desire to contribute to effort supported by other employers or industry	1 5%	10 53%	6 32%	2 11%
Desire to Attract New Employees				
Concern about current or future shortages of skilled labor due to growth or changing technology	0	4 21%	8 42%	7 37%
Need for higher skilled entry-level workers	2 11%	3 16%	5 26%	9 47%
Opportunity to attract young workers for organization's aging workforce	2 11%	7 37%	8 42%	2 11%
Current labor shortage	2 11%	5 26%	9 47%	3 16%
Good way to attract minorities to organization	2 11%	8 42%	6 32%	3 16%
Good way to attract women to organization	3 16%	9 47%	5 26%	2 11%

Percentages may not total 100% due to rounding.

Incentive	Not a Benefit	Minor Benefit	Strong Benefit	Primary Benefit
Opportunity to train future employees	1 5%	4 21%	12 63%	2 11%
Desire to Reduce Costs of Recruiting New Employees				
Some labor costs offset if positions are subsidized	7 39%	4 22%	6 33%	1 6%
Opportunity to offset costs by receiving prescreened potential employees	3 17%	4 22%	10 56%	1 6%
Opportunity to observe or "try out" potential employees	1 5%	7 37%	10 53%	1 5%
Opportunity to Make Improvements within the Company				
Opportunity to provide professional development to current employees	1 6%	6 33%	9 50%	2 11%
Opportunity for employers to reexamine their organization's training	3 16%	6 32%	8 42%	2 11%

Percentages may not total 100% due to rounding.

Coordinator
Ratings of Incentives for Participation in Work-based Learning
(number & percent)

Incentive	Not a Benefit	Minor Benefit	Strong Benefit	Primary Benefit
Desire to Contribute to the Improvement of Education and the Community				
Concern about quality of education	0	0	9 60%	6 40%
Opportunity to network with schools	0	2 13%	7 47%	6 40%
Opportunity to make organizational investment in community	1 7%	2 13%	6 40%	6 40%
Creation of community good will	1 7%	3 20%	8 53%	3 20%
Desire to contribute to effort supported by other employers or industry	0	4 27%	10 67%	1 7%
Desire to Attract New Employees				
Concern about current or future shortages of skilled labor due to growth or changing technology	0	1 7%	2 13%	12 80%
Need for higher skilled entry-level workers	0	0	3 20%	12 80%
Opportunity to attract young workers for organization's aging workforce	3 20%	1 7%	4 27%	7 47%
Good way to attract minorities and woment to organization	1 7%	5 33%	7 47%	2 13%
Opportunity to train future employees	0	0	8 53%	7 41%
Desire to Reduce Costs of Recruiting New Employees				
Some labor costs offset if positions are subsidized	4 27%	7 47%	3 20%	1 7%
Opportunity to offset costs by receiving prescreened potential employees	1 7%	3 20%	6 40%	4 27%

Percentages may not total 100% due to rounding

Incentive	Not a Benefit	Minor Benefit	Strong Benefit	Primary Benefit
Opportunity to observe or "try out" potential employees	0	4 27%	6 40%	5 33%
Opportunity to Make Improvements within the Company				
Opportunity to provide professional development to current employees	3 20%	4 27%	5 33%	3 20%

Percentages may not total 100% due to rounding

Ratings of Disincentives to Participation in Work-based Learning

Percent of Employer Current, Former, and Non-Participants Responding That the Following Disincentive Is (Was) Strongest for Their Organization's Participation in Work-based Learning

Disincentive Rated Number 1 in Importance for Participation in Work-Based Learning	All Employers (N[2] = 76)	Current Employer Participants (N = 49)	Former Employer Participants (N = 15)	Employer Non-Participants (N = 12)
Concern about reliability	12%	14%	13%	0
Cannot always rely upon getting student participants on regular basis	11%	14%	7%	0
Too much time required	9%	10%	0	17%
Organizational changes within the business	9%	4%	27%	8%
Uncertain economic climate	9%	8%	13%	8%
Other[3]	8%	20%	14%	25%
Student trainee may accept a position with a competitor company	7%	8%	7%	0
Opposition of organized labor	5%	2%	0	25%
Internal opposition of workers	4%	2%	7%	8%
Too much bureaucracy of school systems	3%	2%	0	8%
Worker's compensation insurance issues	3%	2%	7%	0
Lost productivity of workers involved	1%	2%	0	0
Lack of technical assistance or troubleshooting from program	1%	2%	0	0
Lack of effective program organization/administration	1%	2%	0	0
Lack of flexibility in program model	1%	2%	0	0

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[2] N reflects the number of valid responses to the question "What is the single, most important potential disincentive that your organization considered in deciding whether or not to participate in work-based learning?." Some employers would not answer this question.

[3] Employers could indicate "other" rather than identify a specific disincentive in the list read to them. This category includes those responses as well as responses to three cited disincentive factors that proved to be too nebulous to interpret. These factors related to the work-based learning programs and are: (1) lask of flexibility in program design; (2) program is new and unproven; and (3) program has poor reputation.

Percentages may not total 100% due to rounding

(Continued)

Percent of Employer Current, Former, and Non-Participants Responding That the Following Disincentive Is (Was) Strongest for Their Organization's Participation in Work-based Learning

Prior, unsuccessful experiences with students in work-based learning	1%	0	7%	0
Concerns about possible violations of child labor laws	1%	2%	0	0
Concerns about possible violations concerning OSHA	1%	2%	0	0

Percentages may not total 100% due to rounding

Percent of Respondents Answering "Strongly Affects Employers' Decision" or "Major Influence Affecting Employers' Decision" to Participate in Work-based Learning

Disincentive	Total Employer Respondents	Current Employer Participants	Former Employer Participants	Employer Non-Participants	Coordinators
Internal opposition of workers	8%	6%	0	36%	7%
Availability of higher-qualified workers at same cost as hiring students	5%	2%	11%	9%	(question not asked)
Lost productivity of workers involved	11%	11%	11%	8%	13%
Too much time required	18%	17%	11%	33%	40%
Organizational changes within the business	22%	19%	37%	17%	(question not asked
Lack of technical assistance or troubleshooting from program	7%	8%	11%	0	(question not asked)
Lack of effective program organization/administration	8%	11%	5%	0	7%
Program is new and unproven	5%	7%	0	0	7%
Program has poor reputation	1%	2%	0	0	20%
Lack of flexibility in program design	1%	6%	11%	27%	13%
Lack of flexibility in program model	12%	6%	16%	36%	20%
Prior, unsuccessful experiences with students in work-based learning	8%	6%	21%	0	40%
Too much bureaucracy of school systems	19%	24%	11%	9%	47%
Student trainee may accept a position with a competitor company	7%	9%	11%	8%	27%
Concern about reliability	17%	13%	21%	27%	20%
Cannot always rely upon getting student participant on regular basis	18%	15%	32%	9%	(question not asked)

Percentages may not total 100% due to rounding

(Continued)
(Percent of Respondents Answering "Strongly Affects Employers' Decision" or "Major Influence Affecting Employers' Decision" to Participate in Work-based Learning)

Disincentive	Total Employer Respondents)	Current Employer Participants	Former Employer Participants	Employer Non-participants	COORDINATORS (N=15)
High school students aren't sufficiently productive in our organization	7%	8%	5%	8%	(question not asked)
Concerns about possible violations of child labor laws	7%	8%	5%	8%	33%
Concerns about possible violations concerning OSHA	8%	7%	5%	17%	(question not asked)
Worker's compensation insurance issues	12%	13%	11%	8%	33%
Opposition of organized labor	11%	10%	5%	25%	40%
Uncertain economic climate	24%	19%	37%	25%	60%

Percentages may not total 100% due to rounding.

Respondents' Combined Ratings of Disincentives for Participation in Work-based Learning (number & percent)

Disincentive	Does not affect Decision	Somewhat Affects Decision	Strongly Affects Decision	Major Influence Affecting Decision
Opposition within the Company to Work-based Learning				
Organization-al changes within the business	58 68%	8 9%	11 13%	8 9%
Opposition of organized labor	68 81%	7 8%	5 6%	4 5%
Internal opposition of workers	59 70%	18 21%	6 7%	1 1%
Reliability of Students				
Availability of higher-qualified workers at same cost as hiring students	64 77%	15 18%	4 5%	
Prior, unsuccessful experiences with students in work-based learning	62 73%	16 19%	5 6%	2 2%
Concern about reliability	43 52%	26 31%	10 12%	4 5%
High school students aren't sufficiently productive in our organization	63 75%	15 18%	5 6%	1 1%
Loss of Productive Employee Working Time				
Lost productivity of workers involved	49 58%	26 31%	8 10%	1 1%
Too much time required	37 44%	32 38%	13 16%	2 2%
Lack of Support from Work-based Learning Program				
Lack of technical assistance or troubleshooting from program	58 69%	20 24%	3 4%	3 4%
Cannot always rely upon getting student participant on regular basis	44 53%	24 29%	12 15%	3 4%

Percentages may not total 100% due to rounding.

Disincentive	Does not affect Decision	Somewhat Affects Decision	Strongly Affects Decision	Major Influence Affecting Decision
Bureaucracy of School System/Work-based Learning Programs				
Lack of effective program organization/administration	59 71%	17 21%	5 6%	2 2%
Lack of flexibility in program model	62 75%	11 13%	9 11%	1 1%
Too much bureaucracy of school systems	55 66%	13 16%	11 13%	5 6%
Potential Loss of Newly Trained Workers				
Student trainee may accept a position with a competitor company	63 76%	12 15%	6 7%	2 2%
Regulatory Restrictions and Insurance Costs				
Concerns about possible violations of child labor laws	63 75%	15 18%	6 7%	
Concerns about possible violations concerning OSHA	63 74%	15 18%	7 8%	
Worker's compensation insurance issues	58 71%	14 17%	8 10%	2 2%
Economic Uncertainty				
Uncertain economic climate	34 40%	31 37%	17 20%	3 4%

Percentages may not total 100% due to rounding.

Current Employer Participants' Ratings of Disincentives to Participation in Work-based Learning (number & percent)

Disincentive	Does not affect Decision	Somewhat Affects Decision	Strongly Affects Decision	Major Influence Affecting Decision
Opposition within the Company to Work-based Learning				
Organization-al changes within the business	37 69%	7 13%	8 15%	2 4%
Opposition of organized labor	43 81%	5 9%	3 6%	2 4%
Internal opposition of workers	38 70%	13 24%	3 6%	
Reliability of Students				
Availability of higher-qualified workers at same cost as hiring students	41 77%	11 21%	1 2%	
Prior, unsuccessful experiences with students in work-based learning	41 76%	10 19%	3 7%	
Concern about reliability	29 55%	17 32%	5 9%	2 4%
High school students aren't sufficiently productive in our organization	42 79%	7 13%	4 8%	
Loss of Productive Employee Working Time				
Lost productivity of workers involved	30 57%	17 32%	5 9%	1 2%
Too much time required	24 45%	20 38%	8 15%	1 2%
Lack of support from Work-based Learning Program				
Lack of technical assistance or troubleshooting from program	36 67%	14 26%	3 6%	1 2%
Cannot always rely upon getting student participant on regular basis	29 55%	16 30%	6 11%	2 4%

Percentages may not total 100% due to rounding.

Disincentive	Does not affect Decision	Somewhat Affects Decision	Strongly Affects Decision	Major Influence Affecting Decision
Bureaucracy of School System/Work-based Learning Programs				
Lack of effective program organization/administration	38 70%	10 19%	4 7%	2 4%
Lack of flexibility in program model	42 79%	8 15%	2 4%	1 2%
Too much bureaucracy of school systems	32 59%	9 17%	9 17%	4 7%
Potential Loss of Newly Trained Workers				
Student trainee may accept a position with a competitor company	39 74%	8 15%	4 8%	1 2%
Regulatory Restrictions and Insurance Costs				
Concerns about possible violations of child labor laws	40 76%	9 17%	4 8%	
Concerns about possible violations concerning OSHA	40 74%	10 19%	4 8%	
Worker's compensation insurance issues	36 69%	9 17%	5 10%	2 4%
Economic Uncertainty				
Uncertain economic climate	19 35%	25 46%	9 17%	1 2%

Percentages may not total 100% due to rounding.

Former Employer Participants' Ratings of Disincentives to Participation in Work-based Learning (number & percent)

Disincentive	Does not affect Decision	Somewhat Affects Decision	Strongly Affects Decision	Major Influence Affecting Decision
Opposition within the Company to Work-based Learning				
Organization-al changes within the business	12 63%		1 5%	6 32%
Opposition of organized labor	16 84%	2 11%	1 5%	
Internal opposition of workers	17 90%	2 11%		
Reliability of Students				
Availability of higher-qualified workers at same cost as hiring students	16 84%	1 5%	2 11%	
Prior, unsuccessful experiences with students in work-based learning	14 74%	1 5%	2 11%	2 11%
Concern about reliability	11 58%	4 21%	2 11%	2 11%
High school students aren't sufficiently productive in our organization	15 79%	3 16%		1 5%
Loss of Productive Employee Working Time				
Lost productivity of workers involved	14 74%	3 16%	2 11%	
Too much time required	10 53%	7 37%	1 5%	1 5%
Lack of Support from Work-based Learning Program				
Lack of technical assistance or troubleshooting from program	16 84%	1 5%		2 11%
Cannot always rely upon getting student participant on regular basis	11 58%	2 11%	5 26%	1 5%

Percentages may not total 100% due to rounding.

Disincentive	Does not affect Decision	Somewhat Affects Decision	Strongly Affects Decision	Major Influence Affecting Decision
Bureaucracy of School System/Work-based Learning Programs				
Lack of effective program organization/administration	15 79%	3 16%	1 5%	
Lack of flexibility in program model	15 79%	1 5%	3 16%	
Too much bureaucracy of school systems	14 74%	3 16%	2 11%	
Potential Loss of Newly Trained Workers				
Student trainee may accept a position with a competitor company	14 74%	3 16%	1 5%	1 5%
Regulatory Restrictions and Insurance Costs				
Concerns about possible violations of child labor laws	16 84%	2 11%	1 5%	
Concerns about possible violations concerning OSHA	16 84%	2 11%	1 5%	
Worker's compensation insurance issues	15 83%	1 6%	2 11%	
Economic Uncertainty				
Uncertain economic climate	8 42%	4 21%	5 26%	2 11%

Percentages may not total 100% due to rounding.

Non-Participants' Ratings of Disincentives to Participation in Work-based Learning (number & percent)

Disincentive	Does not affect Decision	Somewhat Affects Decision	Strongly Affects Decision	Major Influence Affecting Decision
Opposition within the Company to Work-based Learning				
Organization-al changes within the business	9 75%	1 89%	2 17%	
Opposition of organized labor	9 78%		1 8%	2 17%
Internal opposition of workers	4 36%	3 27%	3 27%	1 9%
Reliability of Students				
Availability of higher-qualified workers at same cost as hiring students	7 64%	3 27%	1 9%	
Prior, unsuccessful experiences with students in work-based learning	7 58%	5 42%		
Concern about reliability	3 27%	5 46%	3 27%	
High school students aren't sufficiently productive in our organization	6 50%	5 42%	1 8%	
Loss of Productive Employee Working Time				
Lost productivity of workers involved	5 42%	6 50%	1 8%	
Too much time required	3 25%	5 42%	4 33%	
Lack of Support from Work-based Learning Program				
Lack of technical assistance or troubleshooting from program	6 55%	5 56%		
Cannot always rely upon getting student participant on regular basis	4 36%	6 55%	1 9%	

Percentages may not total 100% due to rounding.

Disincentive	Does not affect Decision	Somewhat Affects Decision	Strongly Affects Decision	Major Influence Affecting Decision
Bureaucracy of School System/Work-based Learning Programs				
Lack of effective program organization/administration	6 60%	4 40%		
Lack of flexibility in program model	5 46%	2 18%	4 36%	
Too much bureaucracy of school systems	9 82%	1 9%		1 9%
Potential Loss of Newly Trained Workers				
Student trainee may accept a position with a competitor company	10 83%	1 8%	1 8%	
Regulatory Restrictions and Insurance Costs				
Concerns about possible violations of child labor laws	7 58%	4 33%	7 8%	
Concerns about possible violations concerning OSHA	7 58%	3 25%	2 17%	
Worker's compensation insurance issues	7 58%	4 33%	1 8%	
Economic Uncertainty				
Uncertain economic climate	7 58%	2 17%	3 25%	

Percentages may not total 100% due to rounding.

Coordinators' Ratings of Disincentives to Participation in Work-based Learning (number & percent)

Disincentive	Does not affect Decision	Somewhat Affects Decision	Strongly Affects Decision	Major Influence Affecting Decision
Opposition within the Company to Work-based Learning				
Opposition of organized labor	4 27%	5 33%	4 27%	2 13%
Internal opposition of workers	6 40%	8 53%	1 7%	0
Reliability of Students				
Prior, unsuccessful experiences with students in work-based learning	3 20%	6 40%	2 13%	4 27%
Concern about reliability	3 20%	9 60%	3 20%	0
Loss of Productive Employee Working Time				
Lost productivity of workers involved	4 27%	9 60%	2 13%	0
Too much time required	2 13%	7 47%	3 20%	3 20%
Lack of Support from Work-based Learning Program				
Program administration hassles	9 60%	6 40%	0	0
Bureaucracy of School System/Work-based Learning Programs				
Lack of effective program organization/administration	11 73%	3 20%	1 7%	0
Lack of flexibility in program model	8 53%	4 27%	3 20%	0
Too much bureaucracy of school systems	4 27%	4 27%	4 27%	3 20%
Potential Loss of Newly Trained Workers				
Student trainee may accept a position with a competitor company	9 60%	2 13%	2 13%	2 13%

Percentages may not total 100% due to rounding.

Disincentive	Does not affect Decision	Somewhat Affects Decision	Strongly Affects Decision	Major Influence Affecting Decision
Regulatory Restrictions and Insurance Cost				
Concern about possible violations of child labor laws	3 20%	9 60	3 20%	0
Worker's compensation insurance issues	6 40%	4 27%	2 13%	3 20%
Economic Uncertainty				
Uncertain economic climate	2 13%	4 27%	6 40%	3 20

Percentages may not total 100% due to rounding.

Strategies That Encourage Employer Participation in Work-based Learning

Work-based Learning Programs That Use Strategy to Encourage Participation in Work-based Learning (Responses from Program Coordinators)

Strategy	Yes	No
Tax Incentives	3 20%	12 80%
Wage Subsidies For Student Workers	5 33%	10 67%
Subsidies to cover Worker's Compensation	7 47%	8 53%
Reimbursement for staff time spent training/ supervising students	1 7%	14 93%
Effective intermediary coordinator to provide troubleshooting and technical assistance	14 93%	1 6%

Percentages may not total 100% due to rounding.

Total Employers Claiming Access to Strategy

Strategy	Yes	No
Tax Incentives	10 13%	70 88%
Wage Subsidies For Student Workers	14 18%	65 82%
Subsidies to cover Worker's Compensation	9 11%	71 89%
Reimbursement for staff time spent training/ supervising students	13 16%	70 84%
Effective intermediary coordinator to provide troubleshooting and technical assistance	55 66%	28 34%

Percentages may not total 100% due to rounding.

Current Employer Participants Claiming Access to Strategy

Strategy	Yes	No
Tax Incentives	6 12%	46 89%
Wage Subsidies For Student Workers	7 14%	44 86%
Subsidies to cover Worker's Compensation	6 12%	46 89%
Reimbursement for staff time spent training/ supervising students	3 6%	51 94%
Effective intermediary coordinator to provide troubleshooting and technical assistance	37 69%	17 32%

Percentages may not total 100% due to rounding.

Former Employer Participants Claiming Access to Strategy

Strategy	Yes	No
Tax Incentives	2 11%	16 89%
Wage Subsidies For Student Workers	5 28%	13 72%
Subsidies to cover Worker's Compensation	1 6%	17 94%
Reimbursement for staff time spent training/ supervising students	1 5%	18 95%
Effective intermediary coordinator to provide troubleshooting and technical assistance	11 58%	8 42%

Percentages may not total 100% due to rounding.

Non-Participants Claiming Access to Strategy

Strategy	Yes	No
Tax Incentives	2 20%	8 80%
Wage Subsidies For Student Workers	2 20%	8 80%
Subsidies to cover Worker's Compensation	2 20%	8 80%
Reimbursement for staff time spent training/ supervising students	9 90%	1 10%
Effective intermediary coordinator to provide troubleshooting and technical assistance	7 70%	3 30%

Percentages may not total 100% due to rounding.

Total Employers' Rating of Attractiveness of Strategy

Strategy	Not An Attractive Incentive	Moderately Attractive Incentive	Very Attractive Incentive	Primary Attractive Incentive
Tax Incentives	22 27%	16 19%	33 40%	12 15%
Wage Subsidies for Student Workers	17 20%	19 23%	36 43%	12 14%
Subsidies to cover worker's compensation	19 23%	21 26%	25 31%	17 21%
Reimbursement for staff time spent training/ supervising students	20 24%	29 34%	28 33%	8 9%
Effective intermediary coordinator to provide troubleshooting and technical assistance	10 12%	17 20%	34 40%	25 29%

Percentages may not total 100% due to rounding.

Current Employer Participants' Rating of Attractiveness of Strategy

Strategy	Not An Attractive Incentive	Moderately Attractive Incentive	Very Attractive Incentive	Primary Attractive Incentive
Tax Incentives	14 28%	9 18%	23 45%	5 10%
Wage Subsidies for Student Workers	12 23%	13 25%	21 40%	6 12%
Subsidies to cover worker's compensation	11 22%	15 29%	13 26%	12 24%
Reimbursement for staff time spent training/ supervising students	13 25%	17 32%	19 36%	4 8%
Effective intermediary coordinator to provide troubleshooting and technical assistance	7 13%	10 19%	21 39%	16 30%

Percentages may not total 100% due to rounding.

Former Employer Participants' Rating of Attractiveness of Strategy

Strategy	Not An Attractive Incentive	Moderately Attractive Incentive	Very Attractive Incentive	Primary Attractive Incentive
Tax Incentives	6 32%	5 26%	6 32%	2 11%
Wage Subsidies for Student Workers	3 16%	5 26%	8 42%	3 16%
Subsidies to cover worker's compensation	5 28%	5 28%	7 39%	1 6%
Reimbursement for staff time spent training/ supervising students	5 26%	9 47%	2 11%	3 16%
Effective intermediary coordinator to provide troubleshooting and technical assistance	2 11%	5 26%	7 37%	5 26%

Percentages may not total 100% due to rounding.

Non-Participants' Rating of Attractiveness of Strategy

Strategy	Not An Attractive Incentive	Moderately Attractive Incentive	Very Attractive Incentive	Primary Attractive Incentive
Tax Incentives	2 15%	2 15%	4 31%	5 39%
Wage Subsidies for Student Workers	2 15%	1 8%	7 54%	3 23%
Subsidies to cover worker's compensation	3 23%	1 8%	5 39%	4 31%
Reimbursement for staff time spent training/ supervising students	2 15%	3 23%	7 54%	1 8%
Effective intermediary coordinator to provide troubleshooting and technical assistance	1 8%	2 15%	6 46%	4 31%

Percentages may not total 100% due to rounding.

Number of Employees Working for the Employers Surveyed

Number of Employees of Employers Surveyed at Respondent's Location

	Average	Median	Range
Total Employers (N = 86)	1,012	113	High: 27,000 Low: 3
Current Employer Participants (N = 54)	1,302	175	High: 27,000 Low: 5
Former Employer Participants (N = 19)	637	52	High: 10,000 Low: 5
Employer Non-Participants (N = 13)	354	180	High: 1,700 Low: 3
Finance/Banking Industries (N = 14)	3,226	300	High: 27,000 Low: 8
Manufacturing Industries (N = 26)	484	175	High: 3,000 Low: 6
Health Fields (N = 9)	924	600	High: 2,500 Low: 5
Printing/Graphic Arts Industries (N = 13)	175	50	High: 800 Low: 8
Service/Retail Industries (N = 19)	344	40	High: 3,500 Low: 40
Other Industries (N = 5)	2,430	1,009	High: 10,000 Low: 1,009

Percentages may not total 100% due to rounding.

Appendix C

Instrument Guides: Interviews with Coordinators and Employer Results

INTERVIEWS WITH COORDINATORS

INTRODUCTION

Hello. My name is ____________. My firm--Policy Studies Associates--has been asked to conduct a study of employer involvement in work-based learning programs for the Office of Technology Assessment, a research arm of the U.S. Congress. OTA is conducting a major study for the Congress and two House and Senate committees on work-based learning. Work-based learning is of interest on Capitol Hill right now because of the recently-passed School-to-Work Opportunities Act.

My colleagues and I have researched programs throughout the country that provide extensive work-based learning experiences with multiple employers. We have identified your program as one of 20 that we would like to learn more about. We'd like to discuss your work-based learning program in a half-hour telephone interview with you or another person who is in charge of coordinating the work-based learning program. Am I speaking to the most appropriate person, or should I be speaking to somebody else?

Would you be willing to answer some of our questions? Thank you for your participation. Before we begin, I want to read you a brief definition of how we're defining "work-based learning" to ensure that we're talking in common terms. We define work-based learning as occurring where learning from work experience in an actual workplace is coordinated in some manner with learning in school, in order to prepare youth for careers and assist them in making the transition from school to work. Does your program have:

- Some sort of work plan for students that details their experience?
- Provide for at least 50 hours per year per participant of work-based learning experiences?
- A sponsor (e.g., the school, a district) as a part of the program
- Some sort of designated school or work-place mentor or supervisor who is assigned to participants (either one-to-one or as a group)

(IF RESPONDENT ANSWERS "NO" TO ANY OF THESE QUESTIONS, THE COMMUNITY IS ELIMINATED FROM THE STUDY BECAUSE IT DOES NOT MEET OUR MINIMAL DEFINITION OF WORK-BASED LEARNING. INTERVIEWER WILL NOT CONTINUE WITH THE QUESTIONNAIRE.)

Most of what I ask you'll be able to answer easily, without looking up information. A few questions are more specific, such as estimates of numbers of employers and student participants over time and contacts of employers your project has worked with. I have even extracted those questions on a separate sheet and would be happy to fax a copy of them to you now before the interview. That way, you could see exactly what information we are looking for and either could answer the questions on that form or, perhaps, could provide us with materials you likely have already prepared so that we can extract the information ourselves.

I. PROGRAM BACKGROUND

1. Are you the coordinator of the work-based learning program? (circle one)

   a. Yes 1
   b. No . . . . 0 ___

2. What is your title? (specify) ________________________________

3. How long have you been in this position? ________________________

4. What percent of your time do you spend as program coordinator?

   ____

The following set of questions are intended to help me understand the type of work-based learning program that you coordinate.

5. How many students participate in your program:

   a. NOW: ______________ . . . . ___
   b. THREE YEARS AGO: __________________ . . . . ___
   c. PLANNED FOR 1995-96: ________________ . . . . ___

6. Of the following work-based learning models, please ESTIMATE how many current student participants are involved in your program.

   (INTERVIEWER: Fill in blanks with numbers of student participants, answer "N.A." for opportunities not offered by the program, or "Don't Know" for missing and unobtainable data [i.e., the respondent has not recorded or cannot approximate the number of participants].)

   a. Mentoring: ____________________ participants . . . . ___

   b. Work-based learning experience(s) that exceed 10 hours per week per student participant: ________________________ participants . . . . ___

   c. Work-based learning experience(s) where participant rotates among several jobs: ______________________________ participants . . . . ___

   d. Unpaid Work-based Learning: ____________________ participants . . ___

   e. Paid Work-based Learning: __________________ participants . . . . ___

   f. Other: (specify) ____________________ participants . . . . ___

7. Does your program offer an experience that is either paid or unpaid work-based learning where the participant earns something of value other than money (e.g., hours toward registered apprenticeship, high school course credits)?

a. Yes 1
b. No . . . . 0 ___

c. If yes, please specify type of program:

8. Is there a required or recommended sequence of experiences (e.g., 10th grade job shadowing, 11th grade unpaid work-based learning experience, 12th grade paid work-based learning)?

a. Yes 1
b. No . . . . 0 ___

c. If yes, please describe.

9. What are the duration and intensity of student participation? (open ended: may be multiple answers depending upon type of experience)

a. Average hours per week per student: ________
b. Total number of hours per student: ________________
________________, ____________________________

c. In what months does the experience(s) typically begin and end? ________________

10. How long has your program operated? since ________ (school year)

11. Do you coordinate all work-based learning programs in the community, or are other coordinating entities involved through different programs?

a. Yes 1
b. No . . . . 0 ___

c. If yes, specify who and what programs.

II. Community Context (This section should be brief–limit respondents to short answers only; details and qualifications of answers are unnecessary)

1. What are the primary industries (labor market focus/foci) in the geographic area that is served by your program? (specify)

2. Have these industries (labor market focus/foci) changed over time? Are there traditional areas of growth? What are they?

3. What is the industry area (labor market focus/foci) that is served by your program? (specify)

4. Please characterize the region's economy: (circle one)

a.	Expanding rapidly	1	
b.	Growing slowly	2	
c.	Flat	3	
d.	Declining	4	___

III. Employer Participants (This is one of the most important sections. Push respondents who are hesitant to give specific numbers. Indicate where number is exact or approximated.)

1. Is the total number of employer participants in your program: (circle one)

a.	Increasing	1	
b.	Remaining stable	2	
c.	Decreasing	3	___

2. I would like you to APPROXIMATE the numbers of employers involved in your program over time. Can you tell me: (INTERVIEWER: Fill in blanks with number of employer participants. If respondent cannot estimate, answer "N.A.")

a. Current Number of Employers Involved	b. Approximate Number of Employers That Have Dropped Out in Last 3 Years	c. Approximate Number of Employers Involved 3 Years Ago (1992-93)	d. Approximate Number of New Employers That Have Begun Participating in Last 3 Years (1992-93)	e. Approximate Number of Employers Approached Over Last 3 Years, but Who Decided Not to Participate
Circle one: Number given is close to exact OR is a rough estimate	Circle one: Number given is close to exact OR is a rough estimate	Circle one: Number given is close to exact OR is a rough estimate	Circle one: Number given is close to exact OR is a rough estimate	Circle one: Number given is close to exact OR is a rough estimate

3. In your opinion, what accounts for the increase, decrease, or consistency of employer participation over time? (open ended)

4. In your experience, what kinds of employers have been the most receptive to providing work-based learning experiences? Why? Have you noticed any patterns? (open ended)

5. Are the employers you work with now the same general group that you worked with when your program began? (circle)

a. Yes, they are the same group of employers 1
b. We work mostly with the same group, but the group has since grown . . 2
c. We work with some of the original group, but there has been significant turnover 3
d. No, we now work with a different group of employers . . . . 4 ___

6. a. Approximately what percentage of employers that you approach about providing work-based learning agree to participate in your program?

______________________ . . . . ___

b. What are the reasons of those who refuse? (open ended)

7. Are there plans for expanding the number of employer participants for next year?

a.	Yes	1	
b.	No	0	___

8. In your opinion, are employers more, less, or equally willing to participate in work-based learning than they were three years ago? (circle one)

a.	More willing	1	
b.	Equally willing	2	
c.	Less willing	3	___

d. Why? Have you observed any patterns over time? (open ended)

IV. Operational Issues: Recruitment Strategies and On-going Program Support

1. a. In terms of full time equivalents (FTEs), can you estimate how much time is spent on employer recruitment?

b. Who (e.g., levels of people and organizations where they work) is involved in recruitment?

2. a. What type(s) of employers does your program target for recruitment? (open ended)

b. Why?

c. Does your program screen employers? (circle)

a.	Yes	1	
b.	No	0	___

d. If yes, how? (open ended)

3. What strategies are used to recruit employers for your program? (circle all that apply)

a.	A call (specify from whom: ____________________)	1	___
b.	A letter of invitation and program summary from coordinating entity, with contact name	1	___
c.	Newspaper articles	1	___
d.	Advertisements	1	___
e.	Recommendation from someone in the industry field or trade association	1	___
f.	Recommendation from employee inside of employer's organization	1	___
g.	Contacts with graduates who are now employed	1	___
h.	Other (specify: ________________________)	1	___

4. What recruitment strategies have you found to be the most successful? Why? (open ended)

5. Have you found that certain models of programs are more appealing to employers than others? Please rate the following program models individually, according to: "unappealing to employers," "somewhat appealing to employers," "very appealing to employers," "the most appealing to employers."

(Rate on scale of 1-4, with 1 as "unappealing to employers" and 4 as "very appealing to employers." 8 indicates a "Don't Know" response.)

(INTERVIEWER: Respondent may answer "Don't Know," but do not offer this directly as an option.)

	Unappealing to Employers	Somewhat Appealing to Employers	Very Appealing to Employers	The most Appealing to Employers	Don't know	
a. Mentoring	1	2	3	4	8	___
b. Job shadows	1	2	3	4	8	___
c. Unpaid work-based learning	1	2	3	4	8	___
d. Paid work-based learning	1	2	3	4	8	___
e. Model where participant earns something of value other than money (e.g., hours toward registered apprenticeship, high school course credits)	1	2	3	4	8	___
f. Other (specify): ______________	1	2	3	4	8	___

6. Does your project: (circle all that apply)

a.	Pre-screen participants for reliability	1	___
b.	Pre-screen participants for technical knowledge	1	___
c.	Pre-screen participants for commitment to further work	1	___
d.	Provide a scheduling coordinator	1	___
e.	Troubleshoot and offer employers technical assistance	1	___

7. In what other ways does this program facilitate employer participation?

V. Perceived Factors–Incentives and Disincentives–for Employer Participation

1. In your experience, what are the important factors affecting employers' decisions of whether to participate in your work-based learning program? (open ended)

2. Here is a list of specific benefits of work-based learning that employers have mentioned in the past. I would like you to rate each factor individually, answering for each one: "not a benefit," "minor benefit," "strong benefit," or "primary benefit."

(Rate on scale of 1-4, with 1 as "not a benefit" and 4 as "strong benefit." 8 indicates a "Don't Know" response.)

(INTERVIEWER: Respondent may answer "Don't Know," but do not offer this directly as an option.)

	Not a Benefit	Minor Benefit	Strong Benefit	Primary Benefit	Don't Know	
a. Concern about the quality of education and desire to become involved in school improvement	1	2	3	4	8	____
b. Opportunity to network with schools, which serve as a supplier of employees	1	2	3	4	8	____
c. Opportunity to make an organizational investment in and commitment to the community	1	2	3	4	8	____
d. Creation of community good will	1	2	3	4	8	____
e. Desire to contribute to an effort supported by other employers or an industry	1	2	3	4	8	____
f. Concern about current or future shortages of skilled labor in their industry due to growth or changing technology	1	2	3	4	8	____
g. Need for higher skilled entry level workers	1	2	3	4	8	____
h. Opportunity to attract young workers for organization's aging workforce	1	2	3	4	8	____
i. Work-based learning is an established tradition of the industry field	1	2	3	4	8	____
j. Good way to attract minorities and women to the company	1	2	3	4	8	____
k. Some labor costs are off-set if positions are subsidized	1	2	3	4	8	____
l. The opportunity to offset some costs by receiving pre-screened potential employees	1	2	3	4	8	____
m. The opportunity to observe or "try out" potential employees	1	2	3	4	8	____
n. The opportunity to provide professional development to current employees	1	2	3	4	8	____
o. The opportunity to train future employees	1	2	3	4	8	____
p. Other (specify) ____________________	1	2	3	4	8	____

3. I would like to know which of the following incentives to encourage employer participation are available to employers in your program. (yes/no for each)

a.	Tax incentives	1	___
b.	Wage subsidies for student workers	1	___
c.	Subsidies to cover worker's compensation	1	___
d.	Reimbursement for staff time spent training/supervising students	1	___
e.	An effective intermediary coordinator to provide troubleshooting and technical assistance	1	___
f.	Other (specify) ____________________________	1	___

4. (IF INCENTIVES ARE OFFERED) Do you believe that most employers who are current participants of your work-based learning program would not participate without these incentives? Why? (open ended)

5. Is there any incentive that your program does not currently offer that you believe would increase employer participation? (open ended)

6. In your experience, why do employers choose not to participate in your work-based learning program? (open ended)

7. The following is a list of specific disincentives for participation in work-based learning that have been mentioned by past employers. For each individual factor, please indicate: "does not affect decision to participate," "somewhat affects decision," "strongly affects decision," or "major influence affecting decision."

(Rate on scale of 1–4, with 1 as "does not affect decision to participate" and 4 as "major influence affecting decision." 8 indicates a "Don't Know" response.)

(INTERVIEWER: Respondent may answer "Don't Know," but do not offer this directly as an option.)

		Does Not Affect Decision	Somewhat Affects Decision	Strongly Affects Decision	Major Influence Affecting Decision	Don't know	
a.	Internal opposition of workers	1	2	3	4	8	____
b.	Lost productivity of workers involved	1	2	3	4	8	____
c.	Too much time required (specify whose time: ________________)	1	2	3	4	8	____
d.	Program administration hassles	1	2	3	4	8	____
e.	Lack of effective program organization/administration	1	2	3	4	8	____
f.	Program is new and unproven	1	2	3	4	8	____
g.	Program has a poor reputation	1	2	3	4	8	____
h.	Lack of flexibility in program design (e.g., hours, schedule, student selection process)	1	2	3	4	8	____
i.	Lack of flexibility in program model (e.g., youth apprenticeship, paid work-based learning)	1	2	3	4	8	____
j.	Prior, unsuccessful experiences with students in work-based learning	1	2	3	4	8	____
k.	Too much bureaucracy of school systems	1	2	3	4	8	____
l.	Student trainee may accept a position with a competitor company	1	2	3	4	8	____
m.	Concern about reliability (e.g., attendance, qualifications) of students	1	2	3	4	8	____
n.	Concern about possible violations of child labor laws	1	2	3	4	8	____
o.	Worker's compensation insurance issues	1	2	3	4	8	____
p.	Opposition of organized labor	1	2	3	4	8	____
q.	Uncertain economic climate	1	2	3	4	8	____
r.	Other (specify: ______________________)	1	2	3	4	8	____

VI. Employer Contacts

Please identify contacts of at least seven employers in your community who might be willing to participate in a 15-minute telephone survey about work-based learning. We are looking for at least three employers that currently are involved in the program and who have been involved for at least three years. We are also seeking at least three employers that your program has recruited to participate in the work-based learning program but (A) at least one of whom declined to participate and (B) at least one of whom participated for a while, but then dropped out.

In addition, to the extent possible, for each employer you name that has ever participated in the program, we would like to know approximate numbers of student participants over time and at each stage of program completion:

(1) CURRENT PARTICIPANT: ______________________________

Contact: ________________________________
Telephone: ______________________________

Number of students currently participating: ______________
At what stages of completion?

Number of students participating three years ago: __________

(2) CURRENT PARTICIPANT: ______________________________

Contact: ________________________________
Telephone: ______________________________

Number of students currently participating: ______________
At what stages of completion?

Number of students participating three years ago: __________

(3) CURRENT PARTICIPANT: ______________________________

Contact: ________________________________
Telephone: ______________________________

Number of students currently participating: ______________
At what stages of completion?

Number of students participating three years ago: __________

(4) FORMER PARTICIPANT: ______________________

Contact: ______________________
Telephone: ______________________

Average number of students participating with this employer per year: __________

(5) NON-PARTICIPANT: ______________________

Contact: ______________________
Telephone: ______________________

(6) EITHER A FORMER PARTICIPANT OR NON-PARTICIPANT: ______________

Contact: ______________________
Telephone: ______________________

IF FORMER PARTICIPANT--Average number of students participating with this employer per year: __________

(7) SPECIFY: PARTICIPANT, NON-PARTICIPANT, OR FORMER PARTICIPANT:

____

Contact: ______________________
Telephone: ______________________

Number of students currently participating: __________
At what stages of completion?

OR

Average number of students participating with this employer per year: __________

Thank you very much for your time and assistance.

FINAL VERSION: 3/13/95

EMPLOYER SURVEY

Circle one: Current work-based learning participant, former participant, never a participant

Community:

Employer:

Contact Name:

Position:

Contact's Telephone:

Contact's Fax Number:

Date of Initial Contact:

Dates of Re-contacts:

Date Telephone Survey Completed:

Interviewer:

Introduction

Hello. My name is ____________. I'm calling at the suggestion of ______________ (name of coordinator). My firm--Policy Studies Associates--has been asked to conduct a study of employer involvement in work-based learning programs for the Office of Technology Assessment, a research arm of the U.S. Congress. OTA is conducting a major study for the Congress and two House and Senate committees on work-based learning. Work-based learning is of interest on Capitol Hill right now because of the recently-passed School-to-Work Opportunities Act.

________________ (name of coordinator) mentioned that you would be an excellent person to survey for our study. Our survey only takes about 15 minutes. Would you have a few minutes now that we can talk? If not, I could call back at a later time today.

The survey is brief and, for the most part, asks questions that require no prior research. However, for employers who have participated in work-based learning opportunities, there is one section of the survey where we ask for numbers of participants now and three years ago.

Before we begin, I want to read you a brief definition of how we're defining "work-based learning" to ensure that we're talking in common terms. We define work-based learning as occurring where learning from work experience in an actual workplace is coordinated in some manner with learning in school, in order to prepare youth for careers and assist them in making the transition from school to work. Some models of work-based learning that would apply under this definition are cooperative education, youth apprenticeships, and internships. In addition, we have established the following four "minimum requirements" for classifying an experience as "work-based learning" as a part of this study. These minimum requirements are:

1. Some sort of work plan for students that details their experience?
2. At least 50 hours per year per participant of work-based learning experiences?
3. A sponsor (e.g., the school, a district) as part of the program
4. Some sort of designated school or work-place mentor or supervisor who is assigned to participants (either one-to-one or as a group)

I. Participation Level in Work-based Learning

[Using the following questions, **INTERVIEWER** will have a conversation with employer to determine if employer is engaged in work-based learning and whether the experience meets this study's definition of work-based learning.]

1. Based on the definition and four "minimum requirements" that I just read, does your organization currently offer coordinated work-based learning experiences to high school-aged students?

   a. Yes (skip to Q3) (= CURRENT PARTICIPANT) 1
   b. No . . . . 0 ____

2. Based on the definition and four "minimum requirements," has your organization ever offered coordinated work-based learning experiences to high school aged students? (circle one)

   a. Yes (skip to Q4) (= FORMER PARTICIPANT) 1
   b. No (skip to Q5) (= NON-PARTICIPANT) . . . . 0 ____

3. **(For CURRENT PARTICIPANTS)** Does your organization currently offer work-based learning experiences as a participant in the program coordinated by ______________________? (circle one)

   a. Yes (skip to Section II.) 1
   b. No (skip to Q6) . . . . 0 ____

4. Has your organization ever offered work-based learning experiences to students through the program coordinated by ______________________? (circle one)

   a. Yes (skip to Q6) 1
   b. No . . . . 0 ____

5. **(For NON-PARTICIPANTS of work-based learning)** Has your organization ever been approached about participating in work-based learning?

   a. Yes 1
   b. No . . . . 0 ____

6. **FOR EMPLOYERS WHO ARE NON- OR FORMER PARTICIPANTS OF _________ PROGRAM:** Why does your organization currently not participate in __________ work-based learning program? (circle all that apply)

		Yes		No
a.	Lack of technical assistance or troubleshooting from program	1	____	0
b.	Lack of effective program organization/administration	1	____	0
c.	Program is new and unproven	1	____	0
d.	Program has a poor reputation	1	____	0
e.	Lack of flexibility in program design (e.g., hours, schedule, student selection process)	1	____	0
f.	Lack of flexibility in program model (e.g., youth apprenticeship, paid work-based learning)	1	____	0
g.	Too much bureaucracy of school systems	1	____	0
h.	Program ended	1	____	0
i.	Could not always rely upon getting a student participant on a regular basis	1	____	0
j.	Organization does not currently have a slot for a participant	1	____	0
k.	Other (specify) ________________________	1	____	0

7. **INTERVIEWER: CATEGORIZE YOUR RESPONDENT**

a.	CURRENT PARTICIPANT OF WORK-BASED LEARNING/CURRENT PARTICIPANT OF PROGRAM (Go to page 5)	1	
b.	CURRENT PARTICIPANT OF WORK-BASED LEARNING/FORMER PARTICIPANT OF PROGRAM (Go to page 5)	2	
c.	CURRENT PARTICIPANT OF WORK-BASED LEARNING/ NON-PARTICIPANT OF PROGRAM (Go to page 5)	3	
d.	FORMER PARTICIPANT OF WORK-BASED LEARNING (Go to page 12) . . .	4	
e.	NON-PARTICIPANT OF WORK-BASED LEARNING (Go to page 17)	5	____

II. Incentives and Disincentives--FOR CURRENT PARTICIPANTS

1. In approximately what year did your organization begin offering work-based learning experiences to high school-aged students?

____

2. Approximately how many students participate in work-based learning experiences at your organization... (**INTERVIEWER:** answer with numbers of student participants)

a. NOW: ________________ . . . . ___
b. THREE YEARS AGO: ____________________ . . . . ___
c. PLANNED FOR 1995-96: __________________ . . . . ___

3. Of the following work-based learning models, please ESTIMATE how many current student participants are involved in your program.

(**INTERVIEWER:** Fill in blanks with numbers of student participants, answer "N.A." for opportunities not offered by the program, or "Don't Know" for missing and unobtainable data [i.e., the respondent has not recorded or cannot approximate the number of participants].)

a. Mentoring: ____________________ participants . . . . ___

b. Work-based learning experience(s) that exceed 10 hours per week per student participant: ___________________________ participants . . . . ___

c. Work-based learning experience(s) where participant rotates among several jobs: ________________________________ participants . . . . ___

d. Unpaid Work-based Learning: ____________________ participants . . ___

e. Paid Work-based Learning: ____________________ participants . . . . ___

f. Other: (specify) ____________________ participants . . . . ___

4A. Does your program offer an experience that is either paid or unpaid work-based learning where the participant earns something of value other than money (e.g., hours toward registered apprenticeship, high school course credits)?

a. No (skip to Q5) 0
b. Yes . . . . 1 ____

4B. If yes, please specify: ______________________________

5. Do the student participants at your organization have a specific title, such as... (**INTERVIEWER:** circle all that apply)

		Yes		No
a.	Interns	1	____	0
b.	Apprentices	1	____	0
c.	Other (specify: ________________)	1	____	0

6. We are interested in learning why employers participate in work-based learning. Here is a list of specific benefits of work-based learning that employers have mentioned in the past. I would like you to rate each factor individually, answering for each one: "not a benefit of participation," "minor benefit," "strong benefit," or "primary benefit."

(**INTERVIEWER:** Rate on scale of 1-4, with 1 as "not a benefit" and 4 as "primary benefit." 8 indicates a "Don't Know" response. Respondent may answer "Don't Know," but do not offer this directly as an option.)

	Not a Benefit	Minor Benefit	Strong Benefit	Primary Benefit	Don't Know	
a. Concern about the quality of education	1	2	3	4	8	____
b. Desire to become involved in school improvement	1	2	3	4	8	____
c. Opportunity to network with schools, which serve as a supplier of employees	1	2	3	4	8	____
d. Opportunity to make an organizational investment in the community	1	2	3	4	8	____
e. Creation of community good will	1	2	3	4	8	____
f. Contributes to organization's positive image in the community	1	2	3	4	8	____
g. Desire to contribute to an effort supported by other employers or an industry	1	2	3	4	8	____
h. Concern about current or future shortages of skilled labor in their industry due to growth or changing technology	1	2	3	4	8	____
i. Need for higher skilled entry level workers	1	2	3	4	8	____
j. Opportunity to attract young workers for organization's aging workforce	1	2	3	4	8	____
k. Current labor shortage	1	2	3	4	8	____
l. Work-based learning is an established tradition of the industry field	1	2	3	4	8	____
m. Good way to attract minorities to the organization	1	2	3	4	8	____
n. Good way to attract women to the organization	1	2	3	4	8	____

	Not a Benefit	Minor Benefit	Strong Benefit	Primary Benefit	Don't Know	
o. Some labor costs are off-set if positions are subsidized	1	2	3	4	8	____
p. The opportunity to offset some costs by receiving pre-screened potential employees	1	2	3	4	8	____
q. The opportunity to observe or "try out" potential employees	1	2	3	4	8	____
r. The opportunity to provide professional development to current employees	1	2	3	4	8	____
s. The opportunity for employers to re-examine their organization's training	1	2	3	4	8	____
t. The opportunity to train future employees	1	2	3	4	8	____
u. Other (specify) ____________________	1	2	3	4	8	____

7A. Of the list I've just read, what is the strongest motivation or benefit of participating in work-based learning for your organization?

a. __________ (**INTERVIEWER**: write in lettered item from list above)
b. Don't know (skip to Q8) 888
c. None (skip to Q8) 999

7B. Why? (open ended) ____

8A. Has your reason(s) for participation changed over time (i.e., since you first began participating)?

a. Yes 1
b. No (skip to Q9) 0
c. Don't know (skip to Q9) 888

____

8B. If yes, please explain. (open ended)

9. The following is a list of strategies that may encourage employer participation in work-based learning. I would like you to tell me if the strategy is currently available to your organization. (**INTERVIEWER:** circle yes/no for each strategy)

	Yes		No
a. Tax incentives	1	___	0
b. Wage subsidies for student workers	1	___	0
c. Subsidies to cover worker's compensation	1	___	0
d. Reimbursement for staff time spent training/supervising students	1	___	0
e. An effective intermediary coordinator to provide troubleshooting and technical assistance	1	___	0
f. Other (specify: ______________________________)	1	___	0

10. Now, I would like to know how attractive the strategy is or would be to your organization, regardless of whether or not it is currently available. For each strategy, please indicate "not an attractive incentive for participation," "moderately attractive incentive for participation," "very attractive incentive for participation," or "primary attractive incentive for participation."

(**INTERVIEWER:** a scale from 1-4, with 1 being "not an attractive incentive for participation" and 4 being "primary attractive incentive for participation.")

		Not Attractive Incentive	Moderately Attractive Incentive	Very Attractive Incentive	Primary Attractive Incentive	Don't know	
a.	Tax incentives	1	2	3	4	8	____
b.	Wage subsidies for student workers	1	2	3	4	8	____
c.	Subsidies to cover worker's compensation	1	2	3	4	8	____
d.	Reimbursement for staff time spent training/supervising students	1	2	3	4	8	____
e.	An effective intermediary coordinator to provide troubleshooting and technical assistance	1	2	3	4	8	____
f.	Other (specify: __________________)	1	2	3	4	8	____

11A. Of the list I've just read, which incentive most encourages your organization to participate in work-based learning at the current time?

a. __________ (**INTERVIEWER:** write in lettered item from list above)
b. Don't know (skip to Q12) 888
c. None (skip to Q12) . . . . 999 ____

11B. Why?

12A. Of the list of incentives that I've just read, which incentive most encouraged your organization to participate in work-based learning when your organization first began participating?

a. __________ (**INTERVIEWER:** write in lettered item from list above)
b. Don't know (skip to Q13) 888
c. None (skip to Q13) . . . . 999 ____

12B. Why?

13. What would it take to encourage your organization to accept more students in work-based learning positions? (open ended question)

14. In addition to talking to employers who participate in work-based learning programs, we are also talking to those who do not participate. We are asking this group to consider some of the reasons why they do not participate. We would like to know the extent to which any of these potential reasons for not participating were ever issues for your organization.

The following is a list of specific disincentives for participation in work-based learning that have been mentioned by past employers. For each individual factor, please indicate: "does not affect my organization's decision to participate," "somewhat affects decision," "strongly affects decision," or "major influence affecting decision."

(**INTERVIEWER:** Rate on scale of 1-4, with 1 as "does not affect decision to participate" and 4 as "major influence affecting decision." 8 indicates a "Don't Know" response. Respondent may answer "Don't Know," but do not offer this directly as an option.)

		Does Not Affect Decision	Somewhat Affects Decision	Strongly Affects Decision	Major Influence Affecting Decision	Don't know	
a.	Internal opposition of workers	1	2	3	4	8	____
b.	Availability of higher-qualified workers at the same cost as hiring students	1	2	3	4	8	____
c.	Lost productivity of workers involved	1	2	3	4	8	____
d.	Too much time required	1	2	3	4	8	____
e.	Organizational changes within the business (e.g., change in ownership, change in departmental structure)	1	2	3	4	8	____
f.	Lack of technical assistance or troubleshooting from program	1	2	3	4	8	____
g.	Lack of effective program organization/administration	1	2	3	4	8	____
h.	Program is new and unproven	1	2	3	4	8	____
i.	Program has a poor reputation	1	2	3	4	8	____
j.	Lack of flexibility in program design (e.g., hours, schedule, student selection process)	1	2	3	4	8	____
k.	Lack of flexibility in program model (e.g., youth apprenticeship, paid work-based learning)	1	2	3	4	8	____
l.	Prior, unsuccessful experiences with students in work-based learning	1	2	3	4	8	____
m.	Too much bureaucracy of school systems	1	2	3	4	8	____
n.	Student trainee may accept a position with a competitor company	1	2	3	4	8	____
o.	Concern about reliability (e.g., attendance, qualifications) of students	1	2	3	4	8	____
p.	Cannot always rely upon getting a student participant on a regular basis	1	2	3	4	8	____
q.	High school students are not sufficiently productive in our organization	1	2	3	4	8	____
r.	Concern about possible violations of child labor laws	1	2	3	4	8	____
s.	Concern about possible violations concerning OSHA health and safety requirements	1	2	3	4	8	____
t.	Worker's compensation insurance issues	1	2	3	4	8	____
u.	Opposition of organized labor	1	2	3	4	8	____
v.	Uncertain economic climate	1	2	3	4	8	____
w.	Other (specify: ______________________)	1	2	3	4	8	____

15A. What is the single, most important potential disincentive that your organization considered in deciding whether to participate in the work-based learning program?

a.	___________ (**INTERVIEWER:** write in lettered item from list above)	
b.	Don't know (skip to Q16)	888
c.	None (skip to Q16)	999

____

15B. Why? (open ended)

16A. Has your organization ever considered discontinuing participation in the work-based learning program?

a.	No (skip to Q17)	0
b.	Yes	1
c.	Don't know (skip to Q17)	888

____

16B. Why? (open ended)

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II. Incentives and Disincentives--FOR FORMER PARTICIPANTS

1. In approximately what year did your organization begin offering work-based learning experiences to high school-aged students?

____

2. In approximately what year did your organization stop offering work-based learning experiences to high school-aged students?

____

3. What factors initially influenced your organization to participate in work-based learning and later to discontinue participation? (open ended)

4. We are interested in learning why employers initially participate in work-based learning and then why they later decide not to participate. Here is a list of specific benefits of work-based learning that employers have mentioned in the past. I would like you to rate each factor individually, answering for each one: "not a benefit of participation," "minor benefit," "strong benefit," or "primary benefit."

(**INTERVIEWER:** Rate on scale of 1-4, with 1 as "not a benefit" and 4 as "primary benefit." 8 indicates a "Don't Know" response. Respondent may answer "Don't Know," but do not offer this directly as an option.)

	Not a Benefit	Minor Benefit	Strong Benefit	Primary Benefit	Don't Know	
a. Concern about the quality of education	1	2	3	4	8	____
b. Desire to become involved in school improvement	1	2	3	4	8	____
c. Opportunity to network with schools, which serve as a supplier of employees	1	2	3	4	8	____
d. Opportunity to make an organizational investment in the community	1	2	3	4	8	____
e. Creation of community good will	1	2	3	4	8	____
f. Contributes to organization's positive image in the community	1	2	3	4	8	____
g. Desire to contribute to an effort supported by other employers or an industry	1	2	3	4	8	____

	Not a Benefit	Minor Benefit	Strong Benefit	Primary Benefit	Don't Know	
h. Concern about current or future shortages of skilled labor in their industry due to growth or changing technology	1	2	3	4	8	____
i. Need for higher skilled entry level workers	1	2	3	4	8	____
j. Opportunity to attract young workers for organization's aging workforce	1	2	3	4	8	____
k. Current labor shortage	1	2	3	4	8	____
l. Work-based learning is an established tradition of the industry field	1	2	3	4	8	____
m. Good way to attract minorities to the organization	1	2	3	4	8	____
n. Good way to attract women to the organization	1	2	3	4	8	____
o. Some labor costs are off-set if positions are subsidized	1	2	3	4	8	____
p. The opportunity to offset some costs by receiving pre-screened potential employees	1	2	3	4	8	____
q. The opportunity to observe or "try out" potential employees	1	2	3	4	8	____
r. The opportunity to provide professional development to current employees	1	2	3	4	8	____
s. The opportunity for employers to re-examine their organization's training	1	2	3	4	8	____
t. The opportunity to train future employees	1	2	3	4	8	____
u. Other (specify) ____________________	1	2	3	4	8	____

5A. Of the list I've just read, what was the strongest motivation or benefit of participating in work-based learning for your organization at the time that it participated?

a. __________ (**INTERVIEWER:** write in lettered item from list above)
b. Don't know (skip to Q6) 888
c. None (skip to Q6) . . . . 999 ____

5B. Please explain.

6. The following is a list of strategies that may encourage employer participation in work-based learning. I would like you to tell me if the strategy was available to your organization when it participated in work-based learning. (**INTERVIEWER:** yes/no for each strategy)

	Yes		No
a. Tax incentives	1	___	0
b. Wage subsidies for student workers	1	___	0
c. Subsidies to cover worker's compensation	1	___	0
d. Reimbursement for staff time spent training/supervising students	1	___	0
e. An effective intermediary coordinator to provide troubleshooting and technical assistance	1	___	0
f. Other (specify: ______________________________)	1	___	0

7. Now, I would like to know how attractive the strategy is or would be to your organization, regardless of whether or not it was ever available. For each strategy, please indicate "not an attractive incentive for participation," "moderately attractive incentive for participation," "very attractive incentive for participation," or "primary attractive incentive for participation."

(**INTERVIEWER:** a scale from 1-4, with 1 being "not an attractive incentive for participation" and 4 being "primary attractive incentive for participation.")

		Not Attractive Incentive	Moderately Attractive Incentive	Very Attractive Incentive	Primary Attractive Incentive	Don't know	
a.	Tax incentives	1	2	3	4	8	___
b.	Wage subsidies for student workers	1	2	3	4	8	___
c.	Subsidies to cover worker's compensation	1	2	3	4	8	___
d.	Reimbursement for staff time spent training/supervising students	1	2	3	4	8	___
e.	An effective intermediary coordinator to provide troubleshooting and technical assistance	1	2	3	4	8	___
f.	Other (specify: ____________________)	1	2	3	4	8	___

8A. Of the list I've just read, which incentive is or would be the most appealing to your organization regarding participation in work-based learning at the current time?

a. __________ (**INTERVIEWER:** write in lettered item from list above)
b. Don't know (skip to Q9) 888
c. None (skip to Q9) . . . . 999 ____

8B. Please explain.

9. What would it take to encourage your organization to re-institute participation in work-based learning? (open ended question)

10. I would now like you to consider some of the reasons why your organization no longer participates in work-based learning. The following is a list of specific disincentives for participation in work-based learning that have been mentioned by past employers. For each individual factor, please indicate: "did not affect my organization's decision not to participate," "somewhat affected decision," "strongly affected decision," or "major influence affecting decision."

(**INTERVIEWER:** Rate on scale of 1-4, with 1 as "did not affect decision not to participate" and 4 as "major influence affecting decision." 8 indicates a "Don't Know" response. Respondent may answer "Don't Know," but do not offer this directly as an option.)

		Did Not Affect Decision	Somewhat Affected Decision	Strongly Affected Decision	Major Influence Affecting Decision	Don't know	
a.	Internal opposition of workers	1	2	3	4	8	____
b.	Availability of higher-qualified workers at the same cost as hiring students	1	2	3	4	8	____
c.	Lost productivity of workers involved	1	2	3	4	8	____
d.	Too much time required	1	2	3	4	8	____
e.	Organizational changes within the business (e.g., change in ownership, change in departmental structure)	1	2	3	4	8	____
f.	Lack of technical assistance or troubleshooting from program	1	2	3	4	8	____

		Did Not Affect Decision	Somewhat Affected Decision	Strongly Affected Decision	Major Influence Affecting Decision	Don't know	
g.	Lack of effective program organization/administration	1	2	3	4	8	____
h.	Program is new and unproven	1	2	3	4	8	____
i.	Program has a poor reputation	1	2	3	4	8	____
j.	Lack of flexibility in program design (e.g., hours, schedule, student selection process)	1	2	3	4	8	____
k.	Lack of flexibility in program model (e.g., youth apprenticeship, paid work-based learning)	1	2	3	4	8	____
l.	Prior, unsuccessful experiences with students in work-based learning	1	2	3	4	8	____
m.	Too much bureaucracy of school systems	1	2	3	4	8	____
n.	Student trainee may accept a position with a competitor company	1	2	3	4	8	____
o.	Concern about reliability (e.g., attendance, qualifications) of students	1	2	3	4	8	____
p.	Cannot always rely upon getting a student participant on a regular basis	1	2	3	4	8	____
q.	High school students are not sufficiently productive in our organization	1	2	3	4	8	____
r.	Concern about possible violations of child labor laws	1	2	3	4	8	____
s.	Concern about possible violations concerning OSHA health and safety requirements	1	2	3	4	8	____
t.	Worker's compensation insurance issues	1	2	3	4	8	____
u.	Opposition of organized labor	1	2	3	4	8	____
v.	Uncertain economic climate	1	2	3	4	8	____
w.	Other (specify: ______________________)	1	2	3	4	8	____

11A. Of the list I've just read, what is the single, most influential disincentive that discouraged your organization's participation in work-based learning?

a. __________ (**INTERVIEWER:** write in lettered item from list above)
b. Don't know (skip to Section III) 888
c. None (skip to Section III) . . . . 999 ____

11B. Please explain.

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II. Incentives and Disincentives--FOR NON-PARTICIPANTS

1. We are interested in learning if the availability of certain incentives might encourage employer participation in work-based learning. The following is a list of strategies that may encourage employer participation in work-based learning. For each one, I would like you to tell me if the strategy was available to your organization at the time your organization was recruited to participate.

	Yes		No
a. Tax incentives	1	___	0
b. Wage subsidies for student workers	1	___	0
c. Subsidies to cover worker's compensation	1	___	0
d. Reimbursement for staff time spent training/supervising students	1	___	0
e. An effective intermediary coordinator to provide troubleshooting and technical assistance	1	___	0
f. Other (specify: ______________________________)	1	___	0

2. Now, I would like to know how attractive the strategy is or would be to your organization, regardless of whether or not it was ever available. For each strategy, please indicate "not an attractive incentive for participation," "moderately attractive incentive for participation," "very attractive incentive for participation," or "primary attractive incentive for participation."

(**INTERVIEWER:** a scale from 1-4, with 1 being "not an attractive incentive for participation" and 4 being "primary attractive incentive for participation.")

	Attractive Incentive	Not Attractive Incentive	Moderately Attractive Incentive	Very Attractive Incentive	Primary Don't know	
a. Tax incentives	1	2	3	4	8	____
b. Wage subsidies for student workers	1	2	3	4	8	____
c. Subsidies to cover worker's compensation	1	2	3	4	8	____
d. Reimbursement for staff time spent training/supervising students	1	2	3	4	8	____
e. An effective intermediary coordinator to provide troubleshooting and technical assistance	1	2	3	4	8	____
f. Other (specify: __________________)	1	2	3	4	8	____

3. Of the list I've just read, would the availability of any incentives encourage your organization to participate in work-based learning?

a. Yes, specify: ______________ 1
(**INTERVIEWER:** write in lettered item from list above)
b. Don't know 888
c. No 0

____

4. What would it take to encourage your organization to participate in work-based learning? (open ended question)

5. I would now like you to consider some of the reasons why your organization has decided not to participate in work-based learning. The following is a list of specific disincentives for participation in work-based learning that have been mentioned by past employers. For each individual factor, please indicate: "did not affect my organization's decision not to participate," "somewhat affected decision," "strongly affected decision," or "major influence affecting decision."

(**INTERVIEWER:** Rate on scale of 1-4, with 1 as "did not affect decision not to participate" and 4 as "major influence affecting decision." 8 indicates a "Don't Know" response. Respondent may answer "Don't Know," but do not offer this directly as an option.)

		Did Not Affect Decision	Somewhat Affected Decision	Strongly Affected Decision	Major Influence Affecting Decision	Don't know	
a.	Internal opposition of workers	1	2	3	4	8	____
b.	Availability of higher-qualified workers at the same cost as hiring students	1	2	3	4	8	____
c.	Lost productivity of workers involved	1	2	3	4	8	____
d.	Too much time required	1	2	3	4	8	____
e.	Organizational changes within the business (e.g., change in ownership, change in departmental structure)	1	2	3	4	8	____
f.	Lack of technical assistance or troubleshooting from program	1	2	3	4	8	____
g.	Lack of effective program organization/administration	1	2	3	4	8	____
h.	Program is new and unproven	1	2	3	4	8	____
i.	Program has a poor reputation	1	2	3	4	8	____
j.	Lack of flexibility in program design (e.g., hours, schedule, student selection process)	1	2	3	4	8	____
k.	Lack of flexibility in program model (e.g., youth apprenticeship, paid work-based learning)	1	2	3	4	8	____

		Did Not Affect Decision	Somewhat Affected Decision	Strongly Affected Decision	Major Influence Affecting Decision	Don't know	
l.	Prior, unsuccessful experiences with students in work-based learning	1	2	3	4	8	____
m.	Too much bureaucracy of school systems	1	2	3	4	8	____
n.	Student trainee may accept a position with a competitor company	1	2	3	4	8	____
o.	Concern about reliability (e.g., attendance, qualifications) of students	1	2	3	4	8	____
p.	Cannot always rely upon getting a student participant on a regular basis	1	2	3	4	8	____
q.	High school students are not sufficiently productive in our organization	1	2	3	4	8	____
r.	Concern about possible violations of child labor laws	1	2	3	4	8	____
s.	Concern about possible violations concerning OSHA health and safety requirements	1	2	3	4	8	____
t.	Worker's compensation insurance issues	1	2	3	4	8	____
u.	Opposition of organized labor	1	2	3	4	8	____
v.	Uncertain economic climate	1	2	3	4	8	____
w.	Other (specify: ______________________)	1	2	3	4	8	____

6A. Of the list I've just read, what is the single, most influential disincentive that discouraged your organization's participation in work-based learning?

a. __________ (**INTERVIEWER:** write in lettered item from list above) 1
b. Don't know (skip to Q7) 888
c. None (skip to Q7) 999

6B. Please explain.

7. Are there any other reasons that your organization has decided not to participate in work-based learning? (open ended)

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III. Recruitment and On-going Program Support

1. Of the following, what methods of recruitment for participating in work-based learning do you respond most favorably to... (circle yes/no)

		Yes		No
a.	A call (specify from whom: ____________________)	1	____	0
b.	A letter of invitation and program summary from coordinating entity, with contact name	1	____	0
c.	Newspaper articles	1	____	0
d.	Advertisements	1	____	0
e.	Recommendation from someone in the industry field or trade association outside of your organization	1	____	0
f.	Recommendation from employee inside of your organization	1	____	0
g.	Contacts with graduates who are now employed	1	____	0
h.	Other (specify: __________________________)	1	____	0

2. Are certain models of programs more appealing to your organization than others? Please rate the following according to: "unappealing," "somewhat appealing," "very appealing," "the most appealing."

(**INTERVIEWER:** Rate on scale of 1-4, with 1 as "unappealing" and 4 as "very appealing." 8 indicates a "Don't Know" response. Respondent may answer "Don't Know," but do not offer this directly as an option.)

	Unappealing	Somewhat Appealing	Very Appealing	The most Appealing	Don't Know	
a. Mentoring	1	2	3	4	8	____
b. Job shadows	1	2	3	4	8	____
c. Unpaid work-based learning	1	2	3	4	8	____
d. Paid work-based learning	1	2	3	4	8	____
e. Model where participant earns something of value other than money (e.g., hours toward registered apprenticeship, high school course credits)	1	2	3	4	8	____
f. Other (specify): __________________________	1	2	3	4	8	____

3. How important is it to your organization that a coordinated work-based learning project offer the following supports for work-based learning? Please rate the following according to: "unimportant," "somewhat important," "very important," "critically important."

(**INTERVIEWER:** Rate on a scale from 1-4, with 1 being "unimportant" and 4 being "critically important." 8 indicates a "Don't Know" response. Respondent may answer "Don't Know," but do not offer this directly as an option.)

		Unimportant	Somewhat Important	Very Important	Critically Important	Don't Know	
a.	Participants pre-screened for reliability	1	2	3	4	8	____
b.	Participants pre-screened for technical knowledge	1	2	3	4	8	____
c.	Participants pre-screened for commitment to further work	1	2	3	4	8	____
d.	Scheduling coordinator	1	2	3	4	8	____
e.	Troubleshooting and offering technical assistance	1	2	3	4	8	____

4. What initial and on-going support services would facilitate your organization's participation in work-based learning? (open ended)

IV. Information about the Employer/Organization

(**INTERVIEWER**: keep this section brief)

1. What are the primary products or services provided by your organization? (specify)

2. Approximately how many people does your organization employ at your location?

____

3. In the past three years, has the number of people employed at your organization: (circle one)

a.	Increased by 10 percent or more	1	
b.	Decreased by 10 percent or more	2	
c.	Remained about the same	3	____

4. In the next three years, do you expect the number of people employed at your organization to: (circle one)

a.	Increase by 10 percent or more	1	
b.	Decrease by 10 percent or more	2	
c.	Remain about the same	3	____

5. What is your position and title in the organization? (specify)

____

Thank you for your time.

Appendix D

Analysis of Employers Grouped by Similar Characteristics

Appendix D
Analysis of Employers Grouped by Similar Characteristics

We attempted survey analysis of employers grouped by three separate similar characteristics, but found the results to be less conclusive than those presented in Chapters II of this report. However, we have included these analyses here as an appendix. The groupings are: (1) employers in two broadly-grouped industries (i.e., service-related and manufacturing-related industries); (2) employers in six specific industries; and (3) employers of three sizes. Results are discussed below.

Responses of Employers in Similar Industries--Grouped Broadly

We broadly grouped all employers into two groups--service-and manufacturing-related industries--to determine any differences in work-based learning participation by industry. The service-related industry category consists of employers in finance/banking, health fields, service/retail, and other organizations (N = 46). The manufacturing-related industry category consists of manufacturing and printing/graphic arts employers (N = 39).

In general, the service-related employers rated a larger number of incentives as "strong" or "primary" than did manufacturing-related employers, which rated a larger number of disincentives as "strong" or "major" influences. (See the two boxes that follow for fuller details.)

Differences in perceptions of incentives to participate. In terms of incentives, some of the results of this grouping include the following:

- In general, a higher percentage of employers in the service-related industries rated community service benefits as "strong" or "primary" reasons for participation in work-based learning than did employers in manufacturing-related industries.

- More employers in the service-related industries considered work-based learning to be a good way to attract minorities to the organization (57 percent versus 37 percent).

- One-third of employers in the service-related industries said that "work-based learning is an established tradition of the industry" was "not a benefit;" most employers (51 percent) in manufacturing-related industries, however, cited this factor as a benefit of participation.

Differences in perceptions of disincentives to participate. In terms of disincentives, more employers in the manufacturing-related industries tended to rate a given disincentive as either "somewhat affects," "strongly affects," or "major influence affecting" decision to participate; more employers in the service industries tended to rate the disincentives as non-issues. A majority of employers in the service industries rated as "does not affect decision" the following factors, in contrast to a majority of employers in the manufacturing industries who rated the same factors as at least "somewhat affects" decision:

- Too much time required

- Uncertain economic climate

Service-related Employers (N=46)

Primary Incentive: Opportunity to train future employees (18 percent)

Other Incentives (rated as "strong" or "primary" benefit by at least 75 percent):

- Desire to become involved in school improvement (90 percent)
- Concern about current or future shortages of skilled labor in the industry due to growth or changing technology (84 percent)
- Opportunity to make an organizational investment in the community (82 percent)
- Concern about the quality of education (76 percent)
- Opportunity to network with schools, which serve as a supplier of employees (76 percent)
- Creation of community good will (76 percent)
- Contributes to organization's positive image in the community (76 percent)
- Need for higher skilled entry level workers (76 percent)

Primary Disincentive: Concern about reliability of students (18 percent)

Other Disincentives (rated as "strong" or "major" influence by at least 15 percent):

- Organizational changes within the business (24 percent)
- Too much time required (18 percent)
- Concern about reliability of students (18 percent)
- Cannot always rely upon getting a student participant on a regular basis (16 percent)
- Uncertain economic climate (15 percent)

Manufacturing-related Employers (N=39)

Primary Incentive: Concern about current or future shortages of skilled labor in industry due to growth or changing technology (20 percent)

Other Incentives:

- Concern about current or future shortages of skilled labor in the industry due to growth or changing technology (86 percent)
- Need for higher skilled entry level workers (86 percent)
- Concern about the quality of education (83 percent)
- Opportunity to make an organizational investment in the community (83 percent)
- Opportunity to train future employees (83 percent)
- Concern about the quality of education (77 percent)

Primary Disincentive: (TIE) Student trainee may accept a position with a competitor company (11 percent); opposition of organized labor (11 percent); and uncertain economic climate (11 percent)

Other Disincentives:

- Uncertain economic conditions (33 percent)
- Too much bureaucracy of school systems (28 percent)
- Organizational changes within the business (21 percent)
- Cannot always rely upon getting a student participant on a regular basis (21 percent)
- Worker's compensation issues (19 percent)
- Too much time required (18 percent)
- Concern about possible violations of OSHA health and safety requirements (18 percent)
- Lack of flexibility in program model (15 percent)
- Concern about reliability of students (15 percent)

In addition, while 76 percent of employers in the service-related industries rated as a non-issue "too much bureaucracy of school systems," only 54 percent of employers in the manufacturing-related industries rated this factor unimportant. Twenty-eight percent of manufacturing-related employers (versus 11 percent of service-related employers) rated this factor as a "strong" or "major" influence in their organization's decision to participate in work-based learning.

Other differences in perceptions of disincentives include the following:

- One-third of the employers in manufacturing industries rated "uncertain economic climate" as a "strong" or "major" factor influencing their organizations' decision to participate in work-based learning; only 15 percent of employers in service industries rated this factor as important. This distinction probably reflects general trends in industry growth--while industries such as health fields and service/retail are growing nationally, many manufacturing industries are downsizing.

- Employers in manufacturing-related industries were more likely to cite "opposition of organized labor" as a "strong" or "major" disincentive to participate (18 percent versus 4 percent of service employers). This finding is consistent with the fact that unions are more likely to exist in manufacturing-related industries than industries that are service-related.

- Employers in manufacturing-related industries were also more likely to cite "worker's compensation issues" as influential factors affecting their organization's decision to participate in work-based learning (19 percent versus 7 percent).

- Finally, more manufacturing-related employers rated "lack of effective program organization/administration" as a factor than did service-related employers (13 percent versus 4 percent). This difference raises an issue of the standards that different industries might apply to making judgments of this type.

Incentives and disincentives for service- and manufacturing-related employers--which factors are strongest? The largest percent of the service-related employers (18 percent) rated "opportunity to train future employees" as their number one incentive for participating in work-based learning. (See "Service-related Employers" box.) Other incentives that are important to this group concern altruism and ways to become involved with school improvement. In terms of disincentives, chief among the concerns of service-related employers are issues of student reliability. Eighteen percent of these employers cited this factor as the primary disincentive for participating in work-based learning. Eleven percent of employers in the service industries rated "good way to attract minorities to organization" as the benefit most pressing for their organization's participation; none of the manufacturing employers rated this incentive as their number one benefit.

A majority of employers in manufacturing-related industries--20 percent--rated "concern about current or future shortages of skilled labor in the industry due to growth or changing technology" as their number one incentive. (See "Manufacturing-related Employers" box.) In terms of disincentives, manufacturing-related employers are most concerned with the following issues: student trainee may accept a position with a competitor company (11 percent), opposition of organized labor (11 percent), and uncertain economic climate (11 percent).

Employers in both industries recognized work-based learning to be beneficial in addressing a need for higher skilled entry level workers. More service-related employers rated benefits connected to community involvement as "strong" or "primary" benefits to participation than did those in the manufacturing-related industries. Manufacturing-related employers, on the other hand, tended to consider the repercussions of participation to their organization more than employers in service-related industries. In terms of competition with other companies, these employers consider as a major disincentive to participation the fact that the training they provide to a student may be used to benefit a competitor if that student accepts a job elsewhere. In terms of opposition from organized labor, more manufacturing-related industries fear that participation in work-based learning could raise tensions in the workplace than do service-related industries. Overall, these differences in emphasis between broadly-grouped categories of employers seem to follow the traditional nature of the two different industries: while service-related employers "aim to please," manufacturing-related employers are focused on getting the job done.

Responses of Employers in Similar Industries--Grouped Narrowly

To determine any differences among employers in different industries, we further grouped the surveyed employers into six industry categories: (1) finance/banking, (2) manufacturing, (3) health fields, (4) printing/graphic arts, (5) service/retail, and (6) other (see Exhibit 19). Because the sample size was small at the outset (N = 86 for all questions but incentives, N = 72 for questions concerning incentives), this further stratification resulted in even smaller numbers of employers within each category, with a range of from five (i.e., other) to 26 (i.e., manufacturing). The analysis yields some observable differences but should be interpreted with caution.

Differences among industries. As Exhibit 20 indicates, in terms of incentives, employers in some industries believed participation in work-based learning to be beneficial because it adds racial and gender diversity to the organization's staff. In particular, 82 percent of employers in the finance/banking industry rated "good way to attract minorities to the organization" and "good way to attract women to the organization" as strong or primary benefits of participation in work-based learning. However, employers in other industries did not consider these issues to be incentives. For most employers in these other industries, benefits of work-based learning participation for diversifying the organization's staff proved to be "not an issue." Especially in the health industry, "attracting women to the organization" was a non-issue. Seventy-one percent of health field employers rated this factor as "not a benefit" for participation in work-based learning. Large percentages of employers in printing/graphic arts, manufacturing, and service/retail industries also rated this incentive as a non-issue.

These findings regarding enhanced workplace diversity are logical because, traditionally, the banking/finance industry has been largely white and male; health fields, on the other hand, are already diverse because the industry traditionally has attracted a large number of female workers of all races and ethnicities. Some manufacturing employers indicated that diversity in their organization--particularly in terms of gender--has remained fairly unimportant. One employer in an automotive plant told a surveyor, "women don't really fit in well in the automotive industry. They're okay when it comes to the paperwork, but they don't do well working with the cars." While this particular

Exhibit 19
Employers Surveyed by Industry and Level of Participation

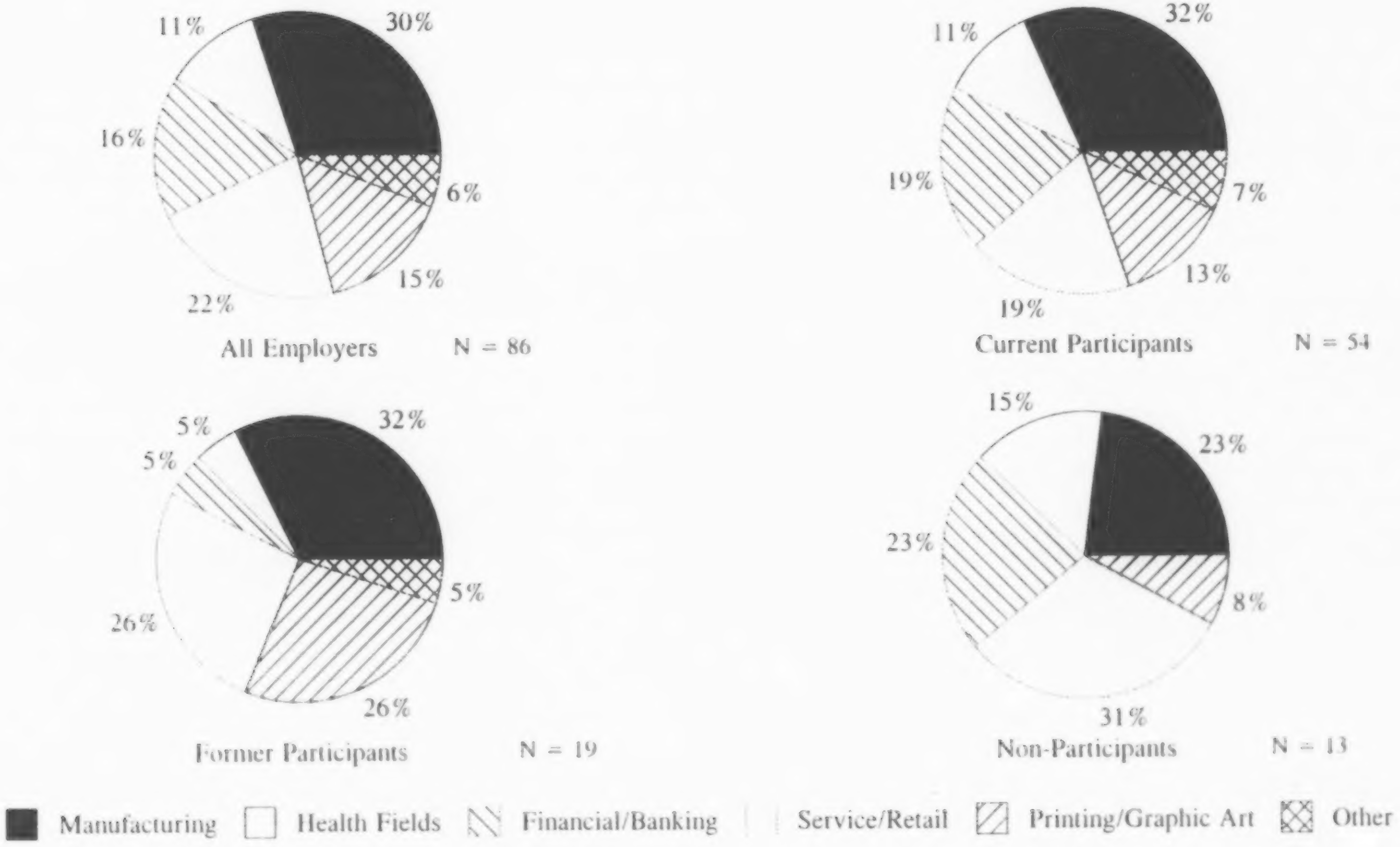


Chart reads: 30 percent of all employers surveyed were from manufacturing industries.

Percents may not sum to 100 due to rounding.

Exhibit 20

Percent of Employers by Industry Rating Incentive as "Strong" or "Primary" Benefit of Participation in Work-based Learning

Incentive	A Majority of Employers Strong or Primary Incentive	Employers Rating Incentive as "Not a Factor" (Where Percent Response Is Greater Than 15%)
Concern about quality of education	All (Range: 57% Health; 100% Other)	Printing/graphic arts (17%)
Desire to become involved in school improvements	All (Range: 83% Manufacturing; 100% Other)	
Opportunity to network with schools, which serve as a supplier of employees	All (Range: 61% Manufacturing; 100% Health)	
Opportunity to make organizational investment in community	All (Range: 60% Other; 100% Health)	
Creation of community good will	Health (100%) Finance/banking (82%) Other (80%) Printing/graphic arts (67%) Service/retail (60%)	
Contributes to organization's positive image in community	All (Range: 60% Service/retail; 100% Health and Other)	
Desire to contribute to effort supported by other employers or industry	Other (80%) Printing/graphic arts (58%) Health (57%) Manufacturing (52%)	Health (29%)
Concern about current or future shortages of skilled labor due to growth or changing technology	All (Range: 57% Health; 100% Other)	
Need for higher skilled entry level workers	All (Range: 57% Health; 100% Other)	
Opportunity to attract young workers for organization's aging workforce	Printing/graphic arts (67%) Service/retail (67%) Other (60%) Finance/banking (55%) Manufacturing (52%)	Finance/banking (27%) Service/retail (20%) Other (20%) Printing/graphic arts (17%)

(Exhibit 20 Continued)

Incentive	A Majority of Employers Strong or Primary Incentive	Employers Rating Incentive as "Not a Factor" (Where Percent Response Is Greater Than 15%)
Current labor shortage	Manufacturing (73%) Other (60%) Service/retail (53%) Printing/graphic arts (50%)	Printing/graphic arts (33%) Health (29%) Finance/banking (27%) Service/retail (27%) Other (20%)
Work-based learning is established tradition of the industry field	Other (60%) Manufacturing (61%)	Health (57%) Service/retail (36%) Financial/banking (27%)
Good way to attract minorities to organization	Finance/banking (82%) Other (60%) Service/retail (53%)	Health (33%) Manufacturing (26%) Printing/graphic arts (25%)
Good way to attract women to organization	Finance/banking (82%) Other (60%)	Health (71%) Printing/graphic arts (25%) Manufacturing (22%) Service/retail (20%)
Some labor costs off-set if positions are subsidized	Other (60%)	Manufacturing (77%) Health (67%) Finance/banking (64%) Service/retail (54%) Printing/graphic arts (46%) Other (40%)
Opportunity to off-set costs by receiving pre-screened potential employees	Other (60%) Printing/graphic arts (58%) Health (57%)	Health (42%) Manufacturing (32%) Service/retail (29%) Finance/banking (27%) Printing/graphic arts (25%)
Opportunity to observe or "try out" potential employees	Health (86%) Other (80%) Printing/graphic arts (75%) Manufacturing (65%)	
Opportunity to provide professional development to current employees	Other (80%) Service/retail (73%) Finance/banking (55%) Printing/graphic arts (55%)	Manufacturing (26%) Printing/graphic arts (18%)
Opportunity for employers to re-examine their organization's training	Printing/graphic arts (58%) Health (57%) Service/retail (53%)	Other (40%) Service/retail (27%) Printing/graphic arts (25%) Finance/banking (18%)
Opportunity to train future employees	All (Range: 57% health; 83% Manufacturing and Printing/graphic arts)	

employer's beliefs may not represent the prevailing industry opinion, others within the manufacturing industry indicated that gender equity was far from a priority for this sector.

In addition, employers in different industries were split over the factor "work-based learning is an established tradition of the industry." While a majority of employers in manufacturing (62 percent) and "other" (60 percent) industries rated this factor as a "strong" or "primary" benefit of participating in work-based learning, no employers in the health industries rated this factor as important. In fact, nearly 60 percent of health field employers rated the issue as a non-factor.

In terms of disincentives, the group of employers to rate the most disincentives as "strong" or "major" was employers in the health fields; the group to rate the least number of disincentives as important was employers in the finance/business industry. However, in only 14 cases--and for only seven of the 22 listed disincentives--did at least one-quarter of employers surveyed within any industry rate a factor as "strong" or "major" influence affecting the organization's decision to participate in work-based learning. Exhibit 21 highlights these cases.

Exhibit 21

Disincentive	25 Percent or More of Employers Rating as Strong or Major Disincentive	Percent of Employers Rating Disincentive as "Not a Factor" (Where Percent Is Greater Than 70%)
Lost productivity of workers involved	Health (37%)	Other (100%) Finance/banking (79%)
Organizational changes within the business	Health (33%) Printing/graphic arts (31%) Finance/banking (29%)	Service/retail (80%) Finance/banking (71 %)
Lack of flexibility in program design	Service/retail (25%)	Other (80%) Finance/banking (79%)
Too much bureaucracy of school systems	Printing/graphic arts (39%) Service/retail (29%)	Health (89%) Finance/banking (86%) Other (80%)
Concern about reliability of students	Health (38%) Service/retail (29%)	
Cannot always rely upon getting a student participant on regular basis	Service/retail (29%) Manufacturing (27%)	Printing/graphic arts (77%) Finance/banking (71%)
Uncertain economic climate	Printing/graphic arts (46%) Health (33%) Manufacturing (27%)	Other (80%)

Distinguishing features of finance/banking industries. Issues of work-based learning as a way to diversify the workforce are strong for employers within the finance/banking industries. In terms of disincentives, more than 90 percent of the employers in the finance/banking industry rated more than one-third of the disincentives on the survey as non-issues--or "does not affect decision to participate." (See box on finance/banking employers.)

Finance/banking Employers (N=14)

Primary Incentive: Opportunity to attract minorities to the organization--27 percent

Other Incentives (rated as "strong" or "primary" benefit by at least 75 percent):

- Concern about the quality of education (91 percent)
- Desire to become involved in school improvement (91 percent)
- Opportunity to make an organizational investment in the community (91 percent)
- Concern about current or future shortages of skilled labor in their industry due to growth or changing technology (91 percent)
- Need for higher skilled entry level workers (91 percent)
- Creation of community good will (82 percent)
- Good way to attract minorities to the organization (82 percent)
- Good way to attract women to the organization (82 percent)

Primary Disincentive: Concern about reliability of students--25 percent

Other Disincentives (rated as "strong" or "major" influence by at least 15 percent):

- Organizational changes within the business (29 percent)
- Too much time required (21 percent)

Distinguishing features of manufacturing industries. Issues of internal opposition of workers and opposition of organized labor were strong disincentives for a large number of employers in manufacturing industries. Issues of work-based learning as a way of diversifying the organization's workforce were non-factors. (See box on manufacturing employers.)

Manufacturing Employers (N=26)

Primary Incentive: Current or future labor shortage due to growth or changing technology--30 percent

Other Incentives (rated as "strong" or "primary" benefit by at least 75 percent):

- Concern about current or future shortages of skilled labor in the industry due to growth or changing technology (87 percent)
- Need for higher skilled entry level workers (87 percent)
- Concern about the quality of education (83 percent)
- Desire to become involved in school improvement (83 percent)
- Opportunity to train future employees (83 percent)
- Opportunity to make an organizational investment in the community (78 percent)

Primary Disincentive: Student trainee may accept a position with a competitor company--17 percent

Other Disincentives (rated as "strong" or "major" influence by at least 15 percent):

- Cannot always rely upon getting a student participant on a regular basis (27 percent)
- Uncertain economic conditions (27 percent)
- Too much bureaucracy of school systems (23 percent)
- Opposition of organized labor (20 percent)
- Worker's compensation issues (17 percent)
- Too much time required (15 percent)
- Organizational changes within the business (15 percent)
- Lack of effective program organization/administration (15 percent)
- Student trainee may accept a position with a competitor company (15 percent)
- Concern about reliability of students (15 percent)

Distinguishing features of health fields industries. While disincentive responses in general were not high, a relatively large number of employers in the health fields rated more disincentives as a "strong" or "major" influence affecting their decision to participate than did employers in other industries other than printing/graphic arts. (See box on health fields employers.)

Health Field Employers (N=9)

Primary Incentive: (no single primary incentive identified by more than 1 employer)

Other Incentives (rated as "strong" or "primary" benefit by at least 75 percent):

- Opportunity to network with schools, which serve as a supplier of employees (100 percent)
- Opportunity to make an organizational investment in the community (100 percent)
- Creation of community good will (100 percent)
- Contributes to organization's positive image in the community (100 percent)
- Desire to become involved in school improvement (86 percent)
- Opportunity to observe or "try out" potential employees (86 percent)

Primary Disincentive: (TIE) Too much time required; concern about reliability of students--25 percent each

Other Disincentives (rated as "strong" or "major" influence by at least 15 percent):

- Concern about reliability of students (38 percent)
- Lost productivity of workers involved (37 percent)
- Organizational changes within the business (33 percent)
- Uncertain economic climate (33 percent)
- Too much time required (15 percent)

Distinguishing features of printing/graphic arts industries. Employers within this industry were the most divided in their responses on individual incentive and disincentive factors. For example, when asked to select the disincentive that had the most bearing on their organization's decision of whether or not to participate in work-based learning, no employers in the printing/graphic arts industry selected the same one. Also, issues that were a "strong" or "major" factor for some of these employers were non-factors for others in the same industry. As a group, printing/graphic arts employers rated the most disincentives highly, indicating that participation in work-based learning for these employers may come with the most drawbacks. (See box on printing/graphic arts employers.)

Printing/graphic Arts Employers (N = 13)

Primary Incentive: (TIE) Desire to become involved in school improvements; opportunity to attract young workers for organization's aging workforce--17 percent each

Other Incentives (rated as "strong" or "primary" benefit by at least 75 percent):

- Opportunity to make an organizational investment in the community (92 percent)
- Contributes to organization's positive image in the community (92 percent)
- Desire to become involved in school improvement (83 percent)
- Opportunity to network with schools, which serve as a supplier of employees (83 percent)
- Concern about current or future shortages of skilled labor in the industry due to growth or changing technology (83 percent)
- Need for higher skilled entry level workers (83 percent)
- Opportunity to train future employees (83 percent)
- Opportunity to observe or "try out" potential employees (75 percent)

Primary Disincentive: (no single primary disincentive identified by more than 1 employer)

Other Disincentives (rated as "strong" or "major" influence by at least 15 percent):

- Uncertain economic climate (46 percent)
- Too much bureaucracy of school systems (39 percent)
- Organizational changes within the business (31 percent)
- Lost productivity of workers involved (23 percent)
- Too much time required (23 percent)
- Lack of flexibility in program model (23 percent)
- Worker's compensation issues (23 percent)
- Concern about reliability of students (15 percent)
- Concern about possible violation of OSHA health and safety requirements (15 percent)
- Opposition of organized labor (15 percent)

Distinguishing features of service/retail industries. Although three-fourths of all employers rated "lack of flexibility in program model" as a non-issue, one-fourth of the employers in the service/retail industry rated this issue as "strong" or "primary" in affecting their organizations' decision of whether or not to participate. (See box on service/retail employers.)

Service/retail Employers (N = 19)

Primary Incentive: Current labor shortage–27 percent

Other Incentives (rated as "strong" or "primary" benefit by at least 75 percent):

- Desire to become involved in school improvement (87 percent)
- Concern about current or future shortages of skilled labor in the industry due to growth or changing technology (87 percent)

Primary Disincentive: Lack of flexibility in program design–20 percent

Other Disincentives (rated as "strong" or "major" influence by at least 15 percent):

- Too much bureaucracy of school systems (29 percent)
- Concern about reliability of students (29 percent)
- Cannot always rely upon getting a student participant on a regular basis (29 percent)
- Lack of flexibility in program design (25 percent)
- Concern about possible violation of child labor laws (24 percent)
- Lack of flexibility in program design (18 percent)
- Worker's compensation insurance issues (18 percent)
- Concern about possible violations of OSHA health and safety requirements (17 percent)
- Too much time required (17 percent)
- Organizational changes within the business (17 percent)

Employers of Similarly-Sized Organizations

Surveyed employers were grouped into three size categories based on the survey sample to examine any differences in perceptions of incentives or disincentives for participation in work-based learning by size of organization. To obtain a relatively even distribution among the three sizes, we grouped employers by medians into thirds (see Exhibits 22, 23, and 24). Small-sized employers--of which there were 25--represented organizations that employed from one to 39 employees at the surveyed location. Of the small firms, 30 percent were service/retail organizations, 20 percent were printing/graphic arts firms, and 20 percent were manufacturing firms. Mid-sized organizations (N = 32) employed from 40 to 323; 34 percent were manufacturing, 28 percent were service/retail, and 19 percent were printing/graphic arts firms. Large-sized organizations (N = 29) employed 324 people and above. The largest organization--a major banking firm--employed 27,000 people, but this size organization is an outlier in the sample. The second, third, and fourth largest organizations in the sample employ about 10,000, 5,000, and 3,500 employees respectively. Of the large organizations, about 35 percent were manufacturing firms. About one-quarter were finance/banking organizations.

Exhibit 22
Number of Employers Grouped by Size

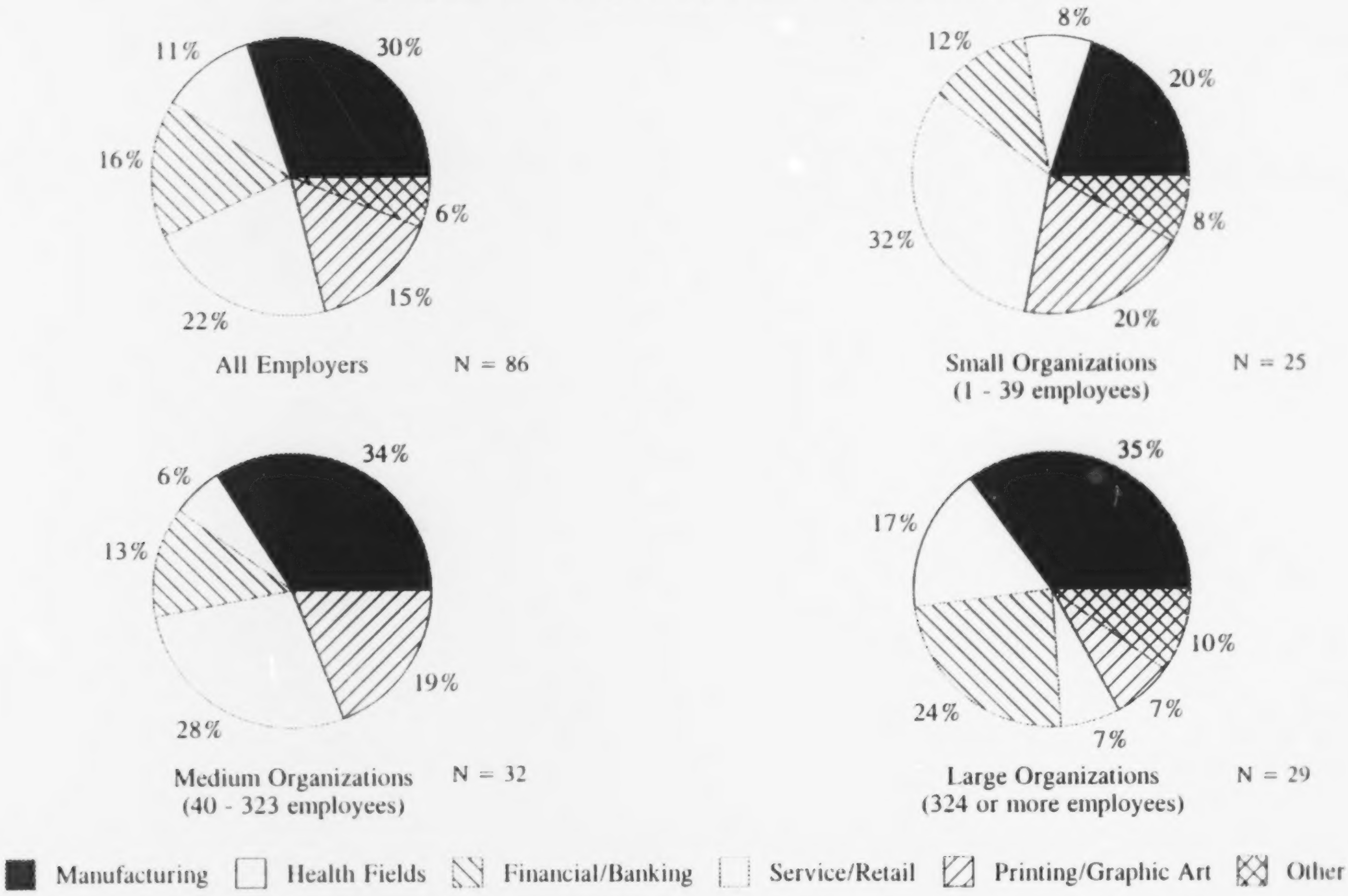
	Small Employers	Mid-sized Employers	Large Employers
Number of Employers in Group	25	32	29
Number of Employees	1-39	40-323	324-above

In general, a majority of large-sized employers cited the greatest number of incentives as "strong" or "primary" to their organization's decision of whether or not to participate in work-based learning; small firms cited the fewest. A majority of mid-sized employers cited the greatest number of disincentives as "strong" or "major"; however--as a group--large-sized employers felt more strongly about the disincentives they did identify. (See the two boxes that follow for details.)

Differences in perceptions of incentives to participate. Overall, small-sized employers were more likely to rate a possible incentive factor as either "not a benefit" or only "somewhat" of a benefit than were the other two groups of employers. This finding is understandable because a majority of the incentives listed on the survey are more likely to have relevance for larger firms. For instance, the survey found a strong correlation between the number of employees at an organization and the number of work-based learning student participants an organization is likely to take. Therefore, because a smaller-sized employer likely would take fewer students for work-based learning, the returns from incentives such as "becoming involved in school improvements" or making an "organizational investment to the community" might be seen as negligible when compared to a mid- or large-sized employer, who is able to take more students and make a broader impact on the community. A large number of small-sized employers did not rate any of the incentives particularly high in terms of benefits to their organization's participation.

In particular, fewer small-sized employers (48 percent) rated "opportunity to network with schools, which serve as a supplier of employees" as a "strong" or "primary" benefit of participation

Exhibit 23
Employers Surveyed by Size and Industry



All Employers N = 86

Small Organizations (1 - 39 employees) N = 25

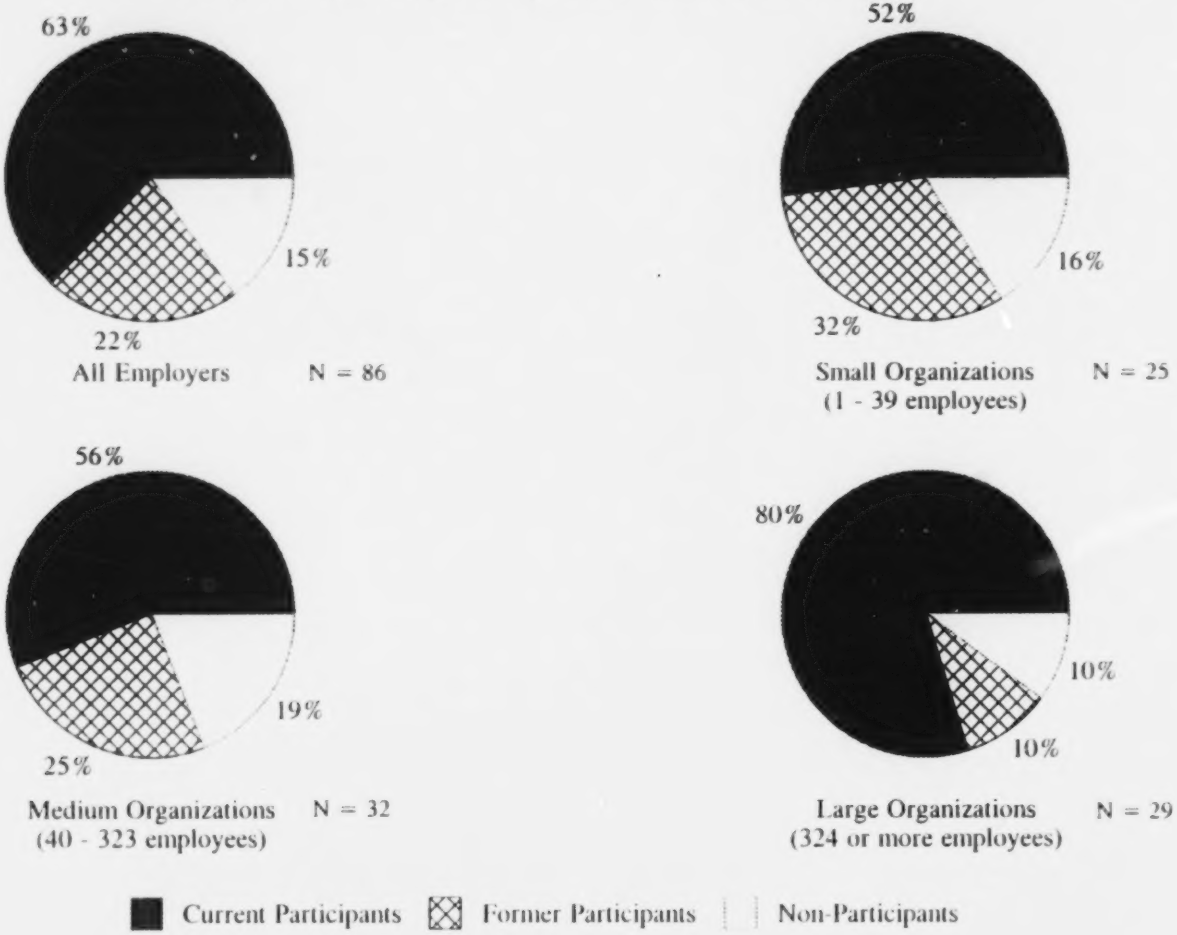
Medium Organizations (40 - 323 employees) N = 32

Large Organizations (324 or more employees) N = 29

Chart reads: 30 percent of all employers surveyed were from manufacturing industries

Percents may not sum to 100 due to rounding.

Exhibit 24
Employers Surveyed by Size and Participation



All Employers N = 86

Small Organizations (1 - 39 employees) N = 25

Medium Organizations (40 - 323 employees) N = 32

Large Organizations (324 or more employees) N = 29

Chart reads: 63 percent of all employees surveyed were current participants of work-based learning.
Percents may not sum to 100 due to rounding.

Small-sized Employers (N=25)

Primary Incentive: Opportunity to train future employees (19 percent)

Other Incentives: (rated as "strong" or "primary by at least 75 percent of employers)

- Desire to become involved in school improvement (81 percent)
- Concern about current or future shortages of skilled labor in the industry due to growth or changing technology (81 percent)
- Concern about the quality of education (76 percent)

Primary Disincentive: (TIE) Too much time required; concern about reliability of students; cannot always rely upon getting a student participant on a regular basis (16 percent)

Other Disincentives: (rated as "strong" or "major" by at least 15 percent of employers)

- Cannot always rely upon getting a student participant on a regular basis (24 percent)
- Concern about reliability of students (20 percent)
- Too much bureaucracy of school systems (17 percent)
- Too much time required (16 percent)

Medium-sized Employers (N=32)

Primary Incentive: Current labor shortage (19 percent)

Other Incentives: (rated as "strong" or "primary by at least 75 percent of employers)

- Opportunity to make an organizational investment in the community (89 percent)
- Desire to become involved in school improvement (85 percent)
- Opportunity to network with schools, which serve as a supplier of employees (85 percent)
- Concern about current or future shortages of skilled labor in the industry due to growth or changing technology (85 percent)
- Concern about the quality of education (77 percent)
- Opportunity to train future employees (81 percent)

Primary Disincentive: (TIE) Lack of flexibility in program design; concern about reliability of students; uncertain economic climate (13 percent)

Other Disincentives: (rated as "strong" or "major" by at least 15 percent of employers)

- Uncertain economic conditions (23 percent)
- Too much time required (19 percent)
- Lack of flexibility in program model (19 percent)
- Too much bureaucracy of school systems (19 percent)
- Lack of effective program organization/administration (17 percent)
- Cannot always rely upon getting a student participant on a regular basis (17 percent)
- Organizational changes within the business (16 percent)
- Lack of flexibility in program design (16 percent)

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Large-sized Employers (N=29)

Primary Incentive: Concern about current or future shortages of skilled labor in the industry due to growth or changing technology (19 percent)

Other Incentives: (rated as "strong" or "primary" by at least 75 percent of employers)

- Desire to become involved in school improvement (92 percent)
- Opportunity to network with schools, which serve as a supplier of employees (92 percent)
- Opportunity to make an organizational investment in the community (85 percent)
- Concern about current or future shortages of skilled labor in the industry due to growth or changing technology (85 percent)
- Need for higher skilled entry level workers (85 percent)
- Contributes to organization's positive image in the community (81 percent)
- Opportunity to train future employees (81 percent)
- Concern about the quality of education (77 percent)
- Creation of community good will (77 percent)

Primary Disincentive: (TIE) Organizational changes within the business; opposition of organized labor (15 percent)

Other Disincentives: (rated as "strong" or "major" by at least 15 percent of employers)

- Organizational changes within the business (38 percent)
- Uncertain economic climate (35 percent)
- Too much bureaucracy of school systems (21 percent)
- Concern about reliability of students (21 percent)
- Too much time required (18 percent)
- Opposition of organized labor (18 percent)
- Internal opposition of workers (17 percent)

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in work-based learning in comparison to employers of larger organizations. Eighty-one percent of the large employers and 85 percent of the medium employers rated this incentive as a "strong" or "primary" benefit. Similarly, a minority of small employers rated "desire to contribute to an effort supported by other employers or an industry" as a "strong" or "primary" benefit (38 percent), while a majority of large employers rated this factor as important (65 percent). Non-issues for small employers include: the opportunity to attract young workers for organization's aging workforce, a current labor shortage, and the opportunity to attract either minorities or women to the organization.

The large-sized employer group was the only one with a majority that rated "opportunity to attract minorities" and "opportunity to attract women to the organization" as strong or primary benefits of participation in work-based learning. "Creation of community good will" also received a strong majority from large employers (77 percent), who felt this was a benefit; the two other groups rated this benefit as somewhat less important (57 percent for small employers and 58 percent for mid-sized ones). However, the issue of "work-based learning is an established tradition in the industry field" is not a very important benefit to large employers

In terms of incentives, no distinctive characteristics are evident among medium-sized employers.

Differences in perceptions of disincentives to participate. Overall, disincentives are stronger for large employers than they are for small or mid-sized ones. Logically, because larger employers are likely to take the most work-based learning student participants, they also assume a larger proportion of the risks associated with taking more students.

Some of the distinctions for large employers are as follows:

- Over twice as many large employers said that "organizational changes within the business" are a "strong" or "major" influence in the organization's decision to participate in work-based learning (38 percent versus 16 percent of mid-sized and 12 percent of small employers).

- Over one-third of large employers cited "uncertain economic climate" as a "strong" or "major" influence affecting their organization's participation in work-based learning. In contrast, only 23 percent of mid-sized employers and 12 percent of small employers cited this factor as important. Furthermore, a majority of small and mid-sized employers cited this factor as "does not affect decision" (as opposed to only 14 percent of large employers).

- A majority of employers across all three groups cited regulatory factors such as concerns over child labor laws, OSHA requirements, and worker's compensation issues as non-issues; however, large employers tended to be somewhat more concerned about these factors than were small or medium employers.

- Large employers were somewhat more concerned about opposition from organized labor (18 percent) and internal opposition of workers (17 percent) as opposed to about 7 percent of either small or medium employers. Larger-sized employers also are more likely to be unionized than are smaller-sized ones. However, a majority of large employers still said that these factors were non-issues.

- While very large majorities of both small and mid-sized employers stated "program is new and unproven" as a non-issue (83 percent and 90 percent, respectively), only 62 percent of large employers cited this factor as unimportant and 10 percent rated this issue as a "strong" influence.

A few distinctions from the survey are evident for mid-sized employers particularly in the areas of student reliability and program flexibility. About 20 percent of both large and small employers rated "concerns about reliability of students" as "strong" or "major" influences on their organization's participation in work-based learning; however, only 10 percent of mid-sized employers rated this issue as important. In addition, while relatively small percentages of small or large employers cited "lack of flexibility in program design" as a "strong" or "major" influence (4 and 7 percent, respectively), a somewhat larger percentage (16 percent) of mid-sized employers stated this factor to be important. Nineteen percent of mid-sized employers also cited "lack of flexibility in program model" as important, as opposed to 4 percent of small employers and 10 percent of large ones.

Finally, small employers are distinguished from either mid-sized or large employers by two factors, both of which concern issues of time. While a majority of employers across all three groups rated "high school students are not sufficiently productive in our organization" as a non-issue, small-sized employers were more concerned about this factor than were either medium or large employers. Also, 16 percent of small employers rated "too much time required" as their organization's primary disincentive to participation (as compared to 8 percent of large employers and 7 percent of mid-sized employers citing this disincentive as the most primary for their organization). Because they hire fewer employees, smaller employers may find it harder to train and supervise them than may mid- or larger-sized employers.

Incentives and disincentives for small, medium, and large-sized employers--which factors are strongest? The largest proportion of small employers cited "opportunity to train future employees" (19 percent) as their organization's number one incentive to participation. Among disincentives, the largest percentage (16 percent) cited "too much time required," "concern about the reliability of students," and "cannot always rely upon getting a student participant on a regular basis" as primary disincentives.

Nineteen percent of mid-sized employers selected "current labor shortage" as their organization's primary benefit to participation in work-based learning. In terms of disincentives, the largest percentage (13 percent) cited "lack of flexibility in program design" and "uncertain economic climate" as number one disincentives.

The largest proportion of large employers--19 percent--indicated that their chief incentive for participating was "concern about current or future labor shortage due to growth or changing technology." The largest percentage of this group--15 percent--rated as their organization's chief disincentive to participation "organizational changes within the business" and "opposition of organized labor."

Acknowledgments

This report is the result of interviews and conversations with a number of dedicated and enthusiastic educators and program coordinators who have taken innovative steps toward securing strong employer participation in work-based learning programs. We especially appreciate the cooperation of the coordinators at our two case study sites in Boston and Philadelphia, who arranged for our visits with limited notice. Similarly, the work-based learning program coordinators whom we interviewed by telephone devoted significant time and effort to answer our extensive survey questions. Without their candor, patience, and referrals to employers, we would have no story to tell.

The study benefitted from the comments, suggestions, and hard work of a number of individuals. First, Elizabeth Reisner and Nancy Adelman at Policy Studies Associates, Inc. contributed to many aspects of the study's design and procedural operations; they also patiently assisted in report edits. Other colleagues at PSA also made significant contributions. Matthew Janger assisted in survey design and analysis. Peter Youngs helped to conduct telephone interviews with employers. In addition, Benjamin Lagueruela and Kim Thomas assisted with report production. Chris Kulick, an independent consultant, led the fieldwork associated with this study. Finally, John Wirt, his staff at the Office of Technology Assessment, and an independent review board offered many helpful comments on both the study design and the analyses, for which the report authors are grateful.